Alternative Energy Promotion Centre

National Rural and Renewable Energy Programme

Annual Progress Report
NFY 2070/71

(15 July 2013 to 16 July 2014)

September, 2014

Version Control Table

Report	Annual Progress Report FY 2070/71					
Report Version	First draft		Final draft		FINAL	
Date	6 August 2014		26 August 2014		30 September 2014	
Status						
Created/ Edited by	Staff: MQA Unit	Sign:	Staff: MQA Unit	Sign:	Staff: MQA Unit	Sign:
Reviewed by	Staff: International Sr. Technical Advisor	Sign:	Staff: International Sr. Technical Advisor	Sign:	Staff: International Sr. Technical Advisor	Sign:
Approved by	Staff: Executive Director	Sign:	Staff: Executive Director	Sign:	Staff: Executive Director	Sign:

List of Abbreviations and Acronyms

ADB	Asian Development Bank
AEPC	Alternative Energy Promotion Centre
ASTHA	Association for Social Transformation and Humanitarians Assistance
AWP	Annual Work Plan
BASE	Backward Society Education
BCT	Bahun/Chhetri/Thakuri
BDS	Business Development Service
BPRC	Business Proposal review Committee
BSP	Biogas Support Programme
CCS	Clean Cooking Solution
CCU	Climate Carbon Unit
CDM	Clean Development Mechanism
CE	Community Electrification
CEDB	Clean Energy Development Bank
CER	Certified Emission Reduction
CREF	Central Renewable l Energy Fund
CSIDB	Cottage and Small Industries Development Board
DAG	Disadvantaged Groups
DCEP	District Climate and Energy Plan
DCRCC	Dhaulagiri Community Resource Development Center
DDC	District Development Committee
DECS	District Energy and Climate Change Section
DEECCS	District Energy Environment and Climate Change Section
DEEU	District Energy and Environment Unit
DFID	UK Department for International Development
DFS	Detail Feasibility Study
DoED	Department of Electricity Development
DPRC	District Project Review Committee
EEO	Energy and Environment Officer
EFLG	Environment Friendly Local Governance
EnDev	Energizing Development
EOI	Expression of Interest
ER	Emission Reductions
ESAP	Energy Sector Assistance Programme
ESMF	Environment Social Management Plan
FEDO	Feminist Dalit Organization
FION	Federation Indigenous of Nepal
FNCCI	Federation of Nepal Chamber and Commerce Industry
FNCSI	Federation of Nepal Cottage and Small Industries
FY	Fiscal Year
GESI	Gender Equality and Social Inclusion
GIS	Geographical Information System
GIZ	German International Cooperation
GoN	Government of Nepal
GWH	Giga Watt hour
HH	Household
IAP	Indoor Air Pollution
ICE	Information Communication Education
ICIMOD	International Centre For Integrated Mountain Development
ICS	Improved Cooking Stove

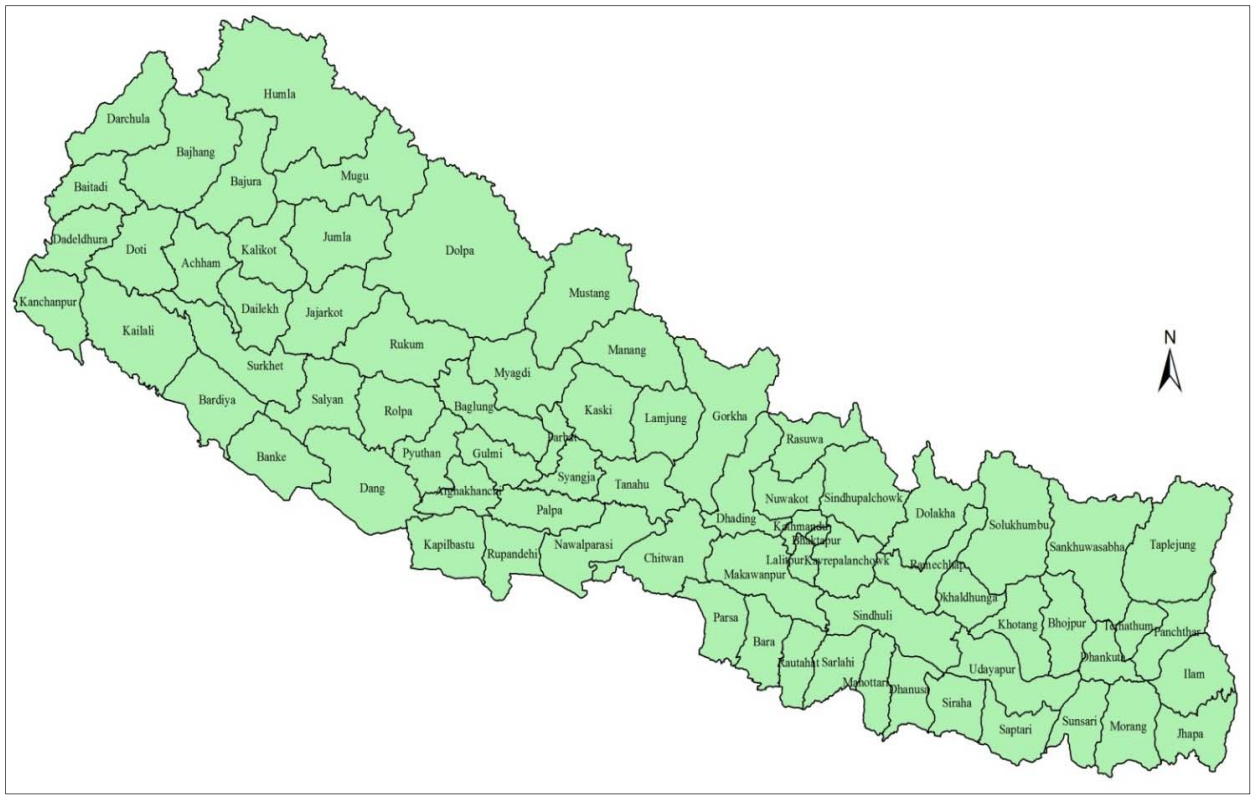
IEC	International Electro technical Commission
IGA	Income Generating Activities
IICS	Institutional Improved Cooking Stove
IoE/TU	Institute of Engineering/Tribhuvan University
ISPS	Institutional Solar Photo Voltaic System
IWM	Improved Water Mill
IWMCF	Improved Water Mill Credit Fund
KFW	German Development Bank
KUTTL	Kathmandu University Turbine Testing Laboratory
kW	Kilo Watt
KWh	Kilo Watt hour
LAPA	Local Adaptation Plan of Action
LDO	Local Development Officer
LEDF	Local Community Development Facilitators
LFA	Logical Framework Approach
LGCDP	Local Governance and Community Development Programme
LPO	Local Partner Organization
M & E	Monitoring and Evaluation
MEDEP	Micro Enterprises Development Programme
MFI	Micro Finance Institution
MHDF	Micro Hydro Debt Fund
MHP	Micro Hydropower Plant
MICS	Metallic Improve Cooking Stove
MIRMS	Management Information Reporting and Monitoring System
MIS	Management Information System
MoE	Ministry of Energy
MoFALD	Ministry of Federal Affairs and Local Development
MoSTE	Ministry of Science Technology and Environment
MoU	Memorandum of Understanding
MQA	Monitoring and Quality Assurance
MSME	Medium and Small and Micro Enterprise
MW	Mega Watt
NACC	Nepal Alliance for Clean Cook stoves
NAST	Nepal Academy of Science and Technology
NAV	Navision
NCDC	Namsaling Community Development Centre
NEA	Nepal Electricity Authority
NEEP	Nepal Energy Efficiency Programme
NEFDIN	National Foundation for Development of Indigenous Nationalities
NEFEJ	Nepal Forum for Environmental Journalist
NEPQA	Nepal Photovoltaic Quality Assurance
NGO	Non Governmental Organization
NITC	National Information Technology Center
NMHDA	Nepal Micro Hydro Development Association
NORAD	Norwegian Agency for Development Cooperation
NPR	Nepalese Rupee
NRREP	National Rural and Renewable Energy Programme
NSP	National Service Providers
NTNC	National Trust for Nature Conservation
O&M	Operations and Maintenance
PEU	Productive Energy Use
PHP	Pico Hydro Power
PoA	Program of Activities

POV	Power Output Verification
PPA/PPR	Public Procurement Act/ Regulation
PPP	Public Private Partnership
PQ	Pre Qualified
PR	Public Relation
PREIP	Plant Rehabilitation and Efficiency Improvement Project
PSC	Programme Steering Committee
PV	Photo Voltaic (electricity generating technology)
PVPS	Photo Voltaic Pumping System
RDSC	Rural Development Service Center
RE	Renewable Energy
REF	Renewable Energy Fund
REMREC	Resource Management and Rural Empowerment Centre
RERL	Renewable Energy for Rural Livelihoods
RET	Renewable Energy Technology
RETS	Renewable Energy Test Station
RFP	Request for Proposal
RRESC	Regional Renewable Energy Service Center
RSC	Regional Service Centre
RST	Random Sampling Test
SAF	Subsidy Application Form
SCDC	Sagarmatha Community Development Center
SEMAN	Solar Electricity Manufacturer's Association Nepal
SESC	Solar Energy Subcomponent
SGBP	Saheri Gharelu Biogas Plants
SHS	Solar Home System
SN	Serial Number
SNV	Netherlands Development Organization
SOD	Strategic and Organizational Development
SREP	Scaling UP Renewable Energy Programme
SSHS	Small Solar Home System
SYIB	Start Your and Improve Your Business
TA	Technical Assistance
ToR	Terms of References
ToT	Training of Trainers
TRC	Technical Review Committee
UK	United Kingdom
ULAB	Used Lead-Acid Battery
UNCDF	United Nations Capital Development Fund
UNDP	United Nations Development Programme
UNESCAP	United Nations Economic and Social Commission for Asia and the Pacific
UNFCCC	United Nations Framework Convention for Climate Change
USD	United States Dollars
VDC	Village Development Committee
WECAN	Water and Energy Consultant's Association of Nepal
WUPAP	Western Uplands Poverty Alleviation Project
WWF	World Wildlife Fund
YTD	Year to Date

Contents

List of Tables:

Political Map of Nepal



1 Executive Summary

Government of Nepal established the Alternative Energy Promotion Centre (AEPC) in 1996 with the objective of developing and promoting renewable energy technologies in Nepal. In due course of time, it has positioned itself as an established national focal agency for the Rural and Renewable Energy sector development in Nepal. As the results of past learning of different programmes and projects, the GoN and development partners jointly agreed to support for the implementation of the National Rural and Renewable Energy Programme (NRREP) which follows single programme modality, started from 16 July 2012 and will end on 15 July 2017 with 184 Million USD estimated budget. The NRREP has successfully completed Second year of its implementation.

This report covers an incremental progress made by NRREP in NFY 2070/71 as well as overview of cumulative progress achieved so far. The report also highlights trimester wise breakdown of physical and financial progress. The MQA unit of the AEPC/NRREP managed, coordinated, compiled and consolidated to prepare this report for which all the program components, subcomponents and units contributed their respective progress status as planned. Despite various operational challenges, NRREP has achieved substantial progress in the reporting year that is summarized below; starting from organizational achievements.

- The CREF has been established. The Investment Committee is formed and secretariat is equipped with professional staffs. The selection process of handling bank and partner banks is ongoing.

- Towards institutional development, preparation of draft Renewable Energy Policy, preparation of Nepal's 20 years perspective plan, preparatory works for the revision of Renewable Energy Subsidy Policy, final draft of AEPC's SoD and revision of NRREP Administration and Financial Guideline are significant achievements of the reporting year. Capacity building of AEPC staff through various training and exposures is another set of achievement towards strengthening AEPC as an institution.

- This year was very much successful in internalizing the previous District Energy and Energy Units into the newly formed District Environment Energy and Climate Change Sections in all DDCs, and the integration of RE planning within the 14 step DDC planning process. AEPC/NRREP provided technical, administrative and managerial supports to 9 partner RSCs, 2 NSPs and 75 DEECCS. The AEPC/NRREP successfully delivered most of its field level activities through the RSCs.

- An ambitious mission: "Clean Cooking Solutions for All by 2017 (CCS4ALL)" has been incorporated in Government's Policy and Programme. With the aim to contribute to accelerate the implementation process towards the set mission, AEPC/NRREP organized RE week, international workshop on Clean Cook stoves, workshop on Thermal applications, Investor forum- 2014 and annual celebration of National Alliance for Clean Cook stoves (NACC).

- A function for the stimulation of a Local Capacity Development Service Market, called RE source has been added in the AEPC and made functional with implementation of few projects. As an initiative

towards RE source developments AEPC has been collaborating with various agencies and implementing different RE projects in different locations such as ENDEV, Clean Start, GEF, 5P, SREP, SASEC etc.

Apart from these broad organizational achievements, the NRREP has been successful in gaining significant results particularly in terms of cross-cutting works, operational tools and mechanisms for further accelerated implementation of NRREP. To showcase a few of them:

- Obtained significant improvements toward bringing effectiveness in the program implementation through adaption of result based planning, monitoring and reporting mechanisms. Major accomplishments of the year are- finalization of NRREP baseline, random monitoring, database, third party monitoring & MIS development and capacity building of staff on QAQC. Start of integrated monitoring is another major strategic shift of the NRREP.

- Managed to secure total revenue of USD 1.99 million attributable to the four Biogas project activities registered with UNFCCC CDM EB. The project activities generated a total 284,423 tons of CO_2 equivalent emission reductions during the verification vintage of 2009/10 to 2011/12. Further, the success also achieved in the area of registration of the Biogas PoA and inclusion of three CPAs into it.

- RET services rendered through RSC/NSPs, DDC and private sectors are mandated for GESI responsiveness, which is regarded as a major milestone. Some of the major accomplishments of the year are- design and operationalization of GESI mainstreaming plan, GESI toolbox, GESI database, GESI audit, gap identification, support to right holders' organizations, publication of knowledge products and media mobilization etc.

From technology promotional perspectives, significant progress has been made in this reporting year. Key progress areas are highlighted below.

- Installed 87,038 numbers of SSHS & SHS, 106 ISPS, 25 PVPS and 212 solar drier/cooker benefiting 88,408 households in the rural areas of Nepal. Provided technical training to 285 people. Other key accomplishments of the year include- improvement of existing solar database management, piloting industrial scale solar dryer, feasibility studies for ISPS and field verification of 10,481 SHS including action taken against the 167 deviated cases.

- Installed 140,871 improved cooking stoves (including mud & metallic) throughout the country benefiting same number of rural households. Officially declared 28 VDCs as IAP free and 2 IAP free IICS clusters. Conducted Biomass Cook stove Design Competition in collaboration with ICIMOD. Provided relevant training to district coordinators, business group, cluster & VDCs. Also conducted various feasibility studies, research and piloting works related to ICS.

- A total of 31, 512 domestic biogas plants are supported by AEPC/NRREP in the reporting year benefiting same number of households of rural areas. Rehabilitated 28, 070 old biogas plants and piloted 4 Plastic Fiber Glass Biogas plants. Other accomplishments include- operationalization of online subsidy application, piloting of data capture through mobile, design Modification of SGBP

and large biogas plants, development of technical guidelines, training to PQ companies, MoU with WWF, large biogas construction etc.

- During the reporting period altogether 42, 875 rural households have been electrified through 4,013.25 kW electricity generated from 253 numbers of Micro/Pico Hydropower Projects. Further, 781 IWMs installed benefiting 40,612 households. Other accomplishments include PQ of service providers, mobilization of additional financial support, preparation and implementation of essential technical guidelines etc.

The promotion of MSME is an important area of NRREP intervention. The progress achieved in this sector is summarized below.

- Established Business Promotion unit in each RSCs and IGA strategy and guideline developed. A total of 300 MSME business plans approved for the subsidy. Formed 171 LEDC, DPRC in 22 districts and a BPRC in the centre. A total of 753 people are expected to be employed through new and upgraded MSMEs. Similarly, a total of 1,013 no of IGA plans are developed apprised and approved for the financial support of which 62% are owned by female Other accomplishment include- SYIB training in 18 catchments, implementation of MSME and IGA guidelines, 46 entrepreneurship training, business plan competition and MoU with different agencies like NTNC, WUPAP, and Practical Action.

The overall financial progress of NRREP in the first and second year is 21%. Total planned budget of NRREP in the current fiscal year was NRS. 3,231,144 (‘000) and the expenses is NRs. 2,514,564 (‘000), meaning that 78% financial progress in the current fiscal year. In the Third trimester of the FY 2070/71, total NRREP expenses is NRs. 1,383,037 (’000) against the planned budget NRs. 1,919,889 (’000), meaning that 72% progress against the third trimester plan. In case of subsidy, total annual planned budget of the year was NRs. 2,299,450 (‘000) and the total disbursement of the year is NRs. 2,177,300 (‘000), meaning that 95% progress against the annual subsidy plan.

Some of the planned activities could not be completed within the set time frame. The NRREP has shifted major incomplete works in the next year. Most common reasons for the deviations were- delay in RSC selection and contractual process, revision of technical modalities and guidelines, delay in company pre qualification process, delay in finalization of engineering manual etc. The NRREP is experiencing few emerging challenges as well to overcome. Please refer to the section 6 of this report for detail analysis of risk and challenges.

The progress trends of the current fiscal year show that we have overshot a few targets but we are behind in some target areas. However, the AEPC/NRREP wants to reassure to its stakeholders that we will remain intact with the set program plan and principles and accelerate the implementation process in the coming fiscal year. The NRREP will also go into the possible solutions to overcome emerging challenges and problems in due course of time. We expect frequent review of the program activities by the AEPC board, coordination committee and Steering committee to recommend additional measures/suggestions for the improvement.

2 NRREP Introduction

2.1 Overview of NRREP

Start date	16 July 2012
Completion date	15 July 2017
Budget	USD 170.1 Million

2.2 Key Program Targets:

• Mini and Micro Hydro power	25,000kW
• Households benefiting from the community electrifications	150, 000 HH
• Improved Water mill	4,000 Nos.
• Solar PV Home Systems	600,000 Nos.
• Improved Cooking Stoves	475,000 Nos.
• Household Biogas plants	130,000 Nos.
• New MSMEs establishment	1,300 Nos.
• Employment increased by MSMEs	19,000 Nos.
• Existing MSMEs upgraded	2,800 Nos.
• Income Generating Activities	15,300 HHs

2.3 Programme Components/Subcomponent/Units:

1. **Central Renewable Energy Fund Component**
2. **Technical Support Component**
    - Biogas Subcomponent
    - Biomass Energy Subcomponent
    - Solar Energy Subcomponent
    - Community Electrification Subcomponent
    - Outreach and Local Governance Subcomponent
    - Institutional Support Subcomponent
    - Monitoring and Quality Assurance Unit
    - Climate Change and Carbon Unit
    - Gender Equality and Social Inclusion Unit

3. **Business Development for Renewable Energy and Productive Energy Use component**

2.4 Development Partners

Denmark, Norway, Germany, KFW, UNDP, UNCDF, UNESCAP, ADB, World Bank, SNV, DFID/UK etc.

2.5 Other Features

- NRREP follows a single program modality. It will not be considered a consolidation or continuation of previous projects/programs. It however takes up the best practices of the past renewable and rural energy programme/projects. Its support package consists of financial resources, technical assistance, capacity building, coordination and collaboration for harmonization and synergy.
- The NRREP is firmly aligned to the existing and evolving GoN framework and structure. The programme follows the GoN subsidy policy and subsidy delivery mechanisms. The M&E systems are aligned towards the GoN monitoring requirements.
- The NRREP adopts a strong focus on poverty reduction and expedite GESI through mainstreaming process into the programme by enhancing capacity building to increase access and claim making capacity.
- The NRREP envisions positive effects on environment and climate change and changes the life of rural women and men in Nepal with due focus to increase and maximize carbon market revenue.
- Democratization and good governance are addressed in different ways into the programme. It works in coordination/collaboration with DDC/DECSs/RSCs, local organizations and private companies following the principles of PPP.
- It emphasizes decentralized energy systems, integrated programmes, environmental sustainability, partnership & coordination, research and technology transfer.
- The overall management of NRREP is carried out by the Programme Steering Committee chaired by Secretary, Ministry of Science, Technology and Environment. With AEPC being the executing agency, the NRREP Programme Director is the Executive Director of AEPC.
- Each component/sub-component/unit is managed by a team led by a Programme Manager and the team is supported by National Advisor, and other programme staff. In addition the program is supported by an international senior technical advisor.
- The programme is equipped with a Compliance Unit to provide oversight and support to financial and procurement management as well as for quality assurance and support to Value for Money audits across NRREP

3 Progress on NRREP Key Targets

3.1 Physical Targets and Progress:

3.1.1 Annual progress status

Table 1- Physical achievements against targets (NFY-70/71)

SN	Program Target Areas	Unit	Annual Target	Annual Achievement				
				T1	T2	T3	Total	%
1.	Mini/Micro Hydro Power	kW	4,500	390.25	366	3,256.75	4,013	89%
		HH	27,000	4,500	3,119	35,256	42,875	>100%
2.	Improved Water	Nos.	750	145	0	217	362	48%
3.	Solar PV Home Systems and Small Solar PV Home Systems	Nos.	125,000	21,309	6,604	59,125	87,038	70%
4.	Institutional Solar PV Systems	Nos.	300	0	0	106	106	35%
5.	Solar Drinking Water Pumping	Nos.	25	0	10	15	25	100%
6.	Solar Dryer	Nos.	300	0	0	212	212	71%
7.	Solar Cooker	Nos.	200	0	0	0	0	0
8.	Mud ICS	Nos.	100,000	0	18,434	117,377	135,811	>100%
9.	Metallic ICS	Nos.	5,000	1,354	1,700	2,006	5,060	>100%
10.	Domestic Biogas	Nos.	30,000	17,393	2,085	12,034	31,512	>100%
11.	Institutional/community Biogas Plants	Nos.	200	0	0	0	0	0
12.	Productive energy use (New and upgraded MSMEs)	Nos	300	6	0	300*	306	>100%
13.	Employment increased by MSMEs	Nos	1,710	14	36	717	767	45%
14.	IGA	HH	1,000	0	0	1,013	1,013	>100%

Notes:

- *The above figures illustrate the progress as per the subsidy release.*
- *Target for domestic biogas has been revised from 26,000 to 30,000. This includes 17,000 plants installed, but not paid subsidy for, in previous f/y*
- **300 passed from REF and other 6 are pilot enterprises supported through technical assistance budget.*

- *Out of the 4,013 kW of Mini/micro/pico hydro project commissioned in f/y 2070/71, 2,302.77 kW is from projects with subsidy from ESAP. A total of 253 projects (143 pico and 110 micro hydro) were commissioned this year of which, 63 numbers were ESAP supported.The reason for lower average power generation under NRREP projects is due to large number of pico hydro projects in this particular year.*

3.1.2 Deviation analysis:

This analysis covers the total deviation in key targets till the end of current fiscal year. The progress shown in above table refers to REF database except non subsidy items. The progress is calculated based on subsidy release by CREF to RETs. Please refer to annexes for list of recommended SAFs by components for subsidy release.
The following analysis gives an overview of deviated quantity against the set milestones of this fiscal year. Further, it gives background information of each target and reasons for the deviation.

Sn	Target areas	Negatively deviated quantity	Remarks/reasons
1.	Mini/Micro Hydro Power	(-487) kW	• Delay in financial closure of the projects, RSC Selection and expansion of national grid
2.	Improved Water Mill	(- 388)Nos	• 419 nos of completed IWM (equivalent to 56% annual progress) SAF are waiting for the subsidy release from REF which is not accounted in the progress. • High demand of IWM from mid and far western region
3.	Solar PV Home Systems and Small Solar PV Home Systems	(-37,962) Nos	• 4,556 nos of completed systems (equivalent to 4% annual progress) SAF are waiting for the subsidy release from REF which is not accounted in the progress. • New standard NEPQA 2013 implemented, New subsidy policy and delivery mechanism, SN tracking implemented in MIS database for quality assurance, bottleneck experience in RETS testing capacity for subsidy program. *Note: The NRREP has realized that additional battery testing units need to be established at RETS.*
4.	Institutional Solar PV Systems	(-194) Nos	• 25 nos of systems (equivalent to 8 % annual progress) SAF are waiting for the subsidy release from REF which is not accounted in the progress.
5.	Solar Drinking Water Pumping System		• The progress is low because of the delayed start due to time taken for preparing formats for feasibility study, system design guideline, subsidy application forms, installation, testing and commissioning forms.
6.	Solar Dryer and Cooker	(-288) Nos	• Market was not completely ready to accelerate the installation of solar dryers and cookers through NRREP subsidy program as there was newly developed technical standards, testing protocol, new qualification of companies, subsidy policy and subsidy delivery mechanism

Sn	Target areas	Negatively deviated quantity	Remarks/reasons
7.	Institutional/community/Commercial Biogas Plants and Waste to Energy Projects	(-200)	• 33 plants (25 Institutional, 7 Commercial and 1 Community) are under construction • The Necessary Guidelines/Operational manuals/tripartite agreements/ subsidy application forms and necessary Mechanism were just finalized in this FY
13.	Employment increased by MSMEs	(-943) Nos	• A lower per MSME employment rate appeared compared to the assumption of program document • Based on approved MSMEs from BPRC and DPRC, Employment proposed per MSME is slightly more than 2.3.

3.1.3 Cumulative progress status:

Table 2: Cumulative Physical Progress of the program:

SN	Physical Targets	Unit	NRREP Target	Cumulative Achievement				Progress Level
				1st year	2nd year	Total	%	
1.	Mini/Micro Hydro Power	kW	25,000	2,187.6	4,013	6,200.6	25%	Medium
		HHs	150,000	20,108	42,875	62,983	42%	High
2.	Improved Water Mill	No.	4,000	1,256	362	1,618	40%	High
3.	Solar PV Home	No.	600,000	99,324	87,038	186,362	31%	Medium
4.	Small Solar PV Home Systems	No.						
5.	Institutional Solar PV Systems	No.	1,550	41	106	197	13%	Low
6.	Drinking Water Pumping Systems	No.		25	25			
7	Solar Dryer	Nos.	7,500	0	212	212	3%	Low
8	Solar Cooker	Nos.		0	0	0		
9.	Mud ICS	No	440,000	128,345	135,811	264,156	60%	High
10.	Metallic ICS	Nos.	35,000	3,806	5,060	8,866	25%	Medium
10.	Domestic Biogas Plants	No.	130,000	4,984	31,512	36,496	28%	Medium

SN	Physical Targets	Unit	NRREP Target	Cumulative Achievement				Progress Level
				1st year	2nd year	Total	%	
11	Institutional/community/Commercial Biogas Plants and Waste to Energy Projects	No.	1200	0	0	0	0	Low
12.	Existing MSMEs upgraded	No.	2,800	0	97	97	4%	Low
13	New MSME established	No.	1,300	65	203	268	21%	Low
14.	Employment increased by	Nos.	19,000	68	767	835	4%	Low
15.	Income Generating	HHs	15,300	0	1013	1,013	7%	Low

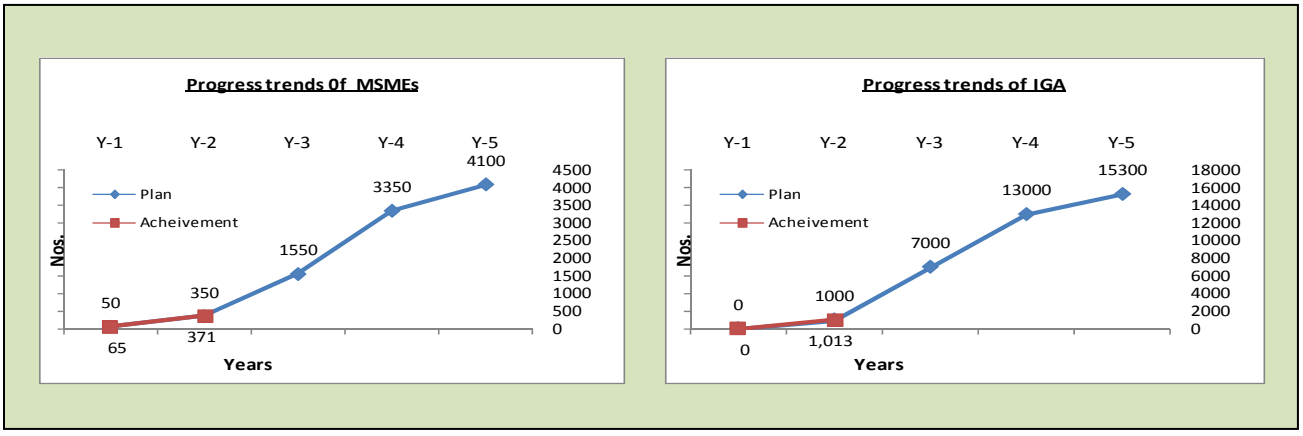
Note:

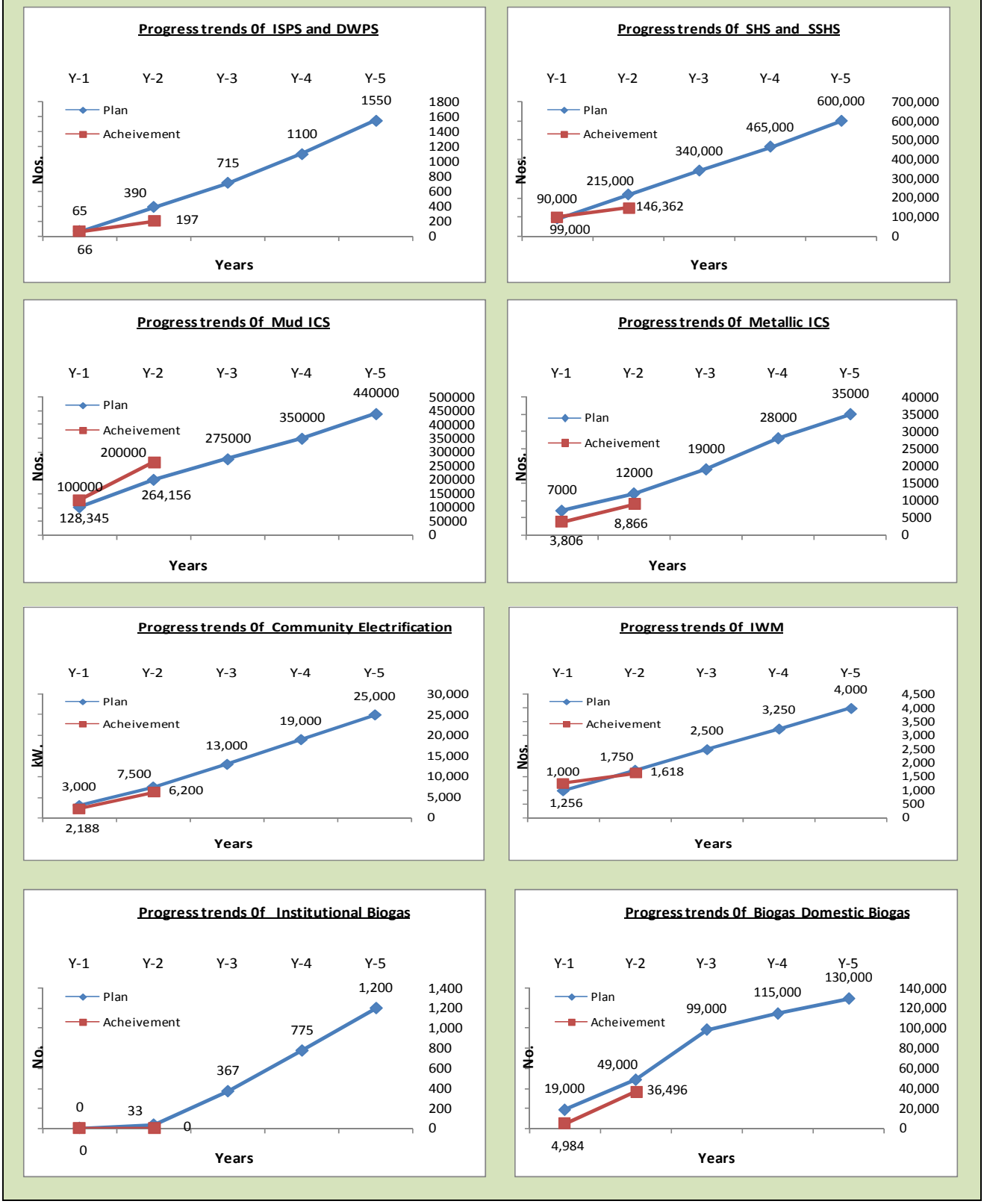
- Progress levels (High, Medium and Low) are just an indicative self assessment based on program duration and targets. [Assumptions: High = greater than 40%, Medium= 26% to 40%, Low =less than 25%]

- Out of the cumulative achievement of 6,200 kW of Mini/micro/pico hydro project commissioned, 4,490.37 kW is from projects with subsidy from ESAP.

3.1.4 Trends of cumulative plan vs. progress of physical targets:

NRREP Targets: Cumulative Plan vs. Cumulative progress trends as of reporting period:




Progress trends 0f ISPS and DWPS
Y-1 Y-2 Y-3 Y-4 Y-5
Plan
Acheivement
Nos.
65
390
715
1100
1550
66
197
1800 1600 1400 1200 1000 800 600 400 200 0
Years
Progress trends 0f SHS and SSHS
Y-1 Y-2 Y-3 Y-4 Y-5
Plan
Acheivement
Nos.
90,000
215,000
340,000
465,000
600,000
99,000
146,362
700,000 600,000 500,000 400,000 300,000 200,000 100,000 0
Years
Progress trends 0f Mud ICS
Y-1 Y-2 Y-3 Y-4 Y-5
Plan
Acheivement
Nos.
100000
200000
275000
350000
440000
128,345
264,156
500000 450000 400000 350000 300000 250000 200000 150000 100000 50000 0
Years
Progress trends 0f Metallic ICS
Y-1 Y-2 Y-3 Y-4 Y-5
Plan
Acheivement
Nos.
7000
12000
19000
28000
35000
3,806
8,866
40000 35000 30000 25000 20000 15000 10000 5000 0
Years
Progress trends 0f Community Electrification
Y-1 Y-2 Y-3 Y-4 Y-5
Plan
Acheivement
kW.
3,000
7,500
13,000
19,000
25,000
2,188
6,200
30,000 25,000 20,000 15,000 10,000 5,000 0
Years
Progress trends 0f IWM
Y-1 Y-2 Y-3 Y-4 Y-5
Plan
Acheivement
Nos.
1,000
1,750
2,500
3,250
4,000
1,256
1,618
4,500 4,000 3,500 3,000 2,500 2,000 1,500 1,000 500 0
Years
Progress trends 0f Institutional Biogas
Y-1 Y-2 Y-3 Y-4 Y-5
Plan
Acheivement
No.
0
33
367
775
1,200
0
0
1,400 1,200 1,000 800 600 400 200 0
Years
Progress trends 0f Biogas Domestic Biogas
Y-1 Y-2 Y-3 Y-4 Y-5
Plan
Acheivement
No.
19,000
49,000
99,000
115,000
130,000
4,984
36,496
140,000 120,000 100,000 80,000 60,000 40,000 20,000 0
Years

3.2 Progress on Subsidy Plan

Table 3- Progress on subsidy plan- NFY-70/71 (Amount in '000 NPR)

SN	Technologies	Annual Budget	Progress in NRs.'000				
			T1	T2	T3	Total	%
1	Mini/Micro Hydro Power	540,000	228,025	70,668	249,685	548,378	101%
2	Improved Water Mill	21,000	2,383	-	3,938	6,321	3%
3	Solar PV Home Systems and Small Solar PV Home Systems	800,000	164,340	44,690	360,518	569,548	71%
4	Institutional Solar PV Systems	240,000	-	-	96,094	96,094	4%
5	Solar Drinking Water Pumping System	25,000	-	14,917	22,333	37,250	149%
6	Solar Dryer	26,400	-	-	1,749	1,749	0.6%
7	Solar Cooker	2,000	-	-	-	-	0%
8	Metallic ICS	36,250	5,393	7,418	8,694	21,505	59%
9	Domestic Biogas Plants	756,000	478,030	58,360	339,958	876,348	116%
10	Institutional/community Biogas/Commercial Plants and Waste to Energy Projects	40,000	-	-	-	-	0%
11	Productive energy use (New and upgraded MSMEs)	54,000	-	-	20,108	20,108	37%
	Total	**2,299,450**	**878,171**	**196,053**	**1,103,076**	**2,177,300**	**95%**

3.3 Cumulative progress on subsidy

Table 4: Analysis of Cumulative Progress on subsidy:

SN	Physical Targets	Program Budget (Yr 1 & Yr 2)	Cumulative Achievement			
			1st year	2nd year	Total	%
1	Mini/Micro Hydro Power	1,140,000	452,320	548,378	1,000,698	88%
2	Improved Water Mill	43,000	16,974	6,321	23,295	54%
3	Solar PV Home Systems and	1,490,000	723,688	569,548	1,293,236	87%
4	Institutional Solar PV Systems	280,000	32,865	96,094	128,959	46%

SN	Physical Targets	Program Budget (Yr 1 & Yr 2)	Cumulative Achievement			
			1st year	2nd year	Total	%
5	Solar Drinking Water Pumping	50,000	28,093	37,250	65,343	131%
6	Solar Dryer	26,400	0	1,749	1,749	7%
7	Solar Cooker	2,000	0	-	0	0%
8	Metallic ICS	64,250	14,314	21,505	35,819	56%
9	Domestic Biogas Plants	1,076,000	136,269	876,348	1,012,617	94%
10	Institutional/community Biogas	41,980	0	-	0	0%
11	Productive energy use (New	69,000	6,155	20,108	26,263	4%
	Total	**4,282,630**	**1,410,67**	**2,177,30**	**3,587,979**	**84%**

3.4 Progress against Budget Plan

Table 5- Progress on annual budget plan NFY-70/71

(Amount in '000 NPR)

Budget heads	Annual Budget	Annual Expenses	Budget Balance	Fund Util. (%)
Central Renewable Energy fund Component	2,437,447	1,939,922	497,525	80%
Technical Support Component	567,500	426,950	140,550	75%
Business Dev. for RE and Productive Energy use	65,000	47,685	17,315	73%
NRREP Management	154,197	96,403	57,794	63%
Studies, Audit, Review	7,000	3,603	3,397	51%
Total	**3,231,144**	2,514,564	716,580	78%

** Revised annual budget.*

Imp note: Please refer to Annex 7.12 for output wise and 7.13 for donor wise breakdowns of annual budget and expenditure

Table 6- Progress on Trimester-3 budget plan NFY-70/71

(Amount in '000 NPR)

Budget heads	Trimester- 3 Plan	Expenses	Fund Util. (%)
Central Renewable Energy fund Component	1,602,098.00	1,096,902	68%
Technical Support Component	230,961.00	216,691	94%

Budget heads	Trimester- 3 Plan	Expenses	Fund Util. (%)
Business Dev. for RE and Productive Energy use	33,681.00	25,729	76%
NRREP Management	51,399.00	40,987	80%
Studies, Audit, Review	1,750.00	2,729	156%
Total	**1,919,889.00**	1,383,037	72%

Table 7: Analysis of Cumulative Progress on program budget:

(Amount in '000 NPR)

SN	Budget Heads	NRREP Budget	Achievements (Expenditures)			Fund Utilization (%)
			1st year	2nd year	Total	
1	Central Renewable Energy fund	9,923,394	431,306	1,939,922	2,371,228	24%
2	Technical Support Component	3,518,374	164,184	426,950	591,134	17%
3	Business Dev. for RE and Productive	737,016	9,814	47,685	57,499	8%
4	NRREP Management	447,474	67,291	96,403	163,694	37%
5	Studies, Audit, Review	298,316	-	3,603	3,603	1%
	NRREP Total	**14,924,574**	**672,594**	**2,514,564**	**3,187,159**	**21%**

3.5 Progress on GON-DPs cost sharing plan

Table 8- Progress on cost sharing plan

GoN & DPs	Committed Annual Budget (NRs)	Fund Released (NRs)	Expenses (NRs)
DPs' Total	**2,204,383,000** • *68% of sub total*	**981,462,038.70** • *45% of committed* • *50% of sub total*	**1,590,224,478.79** • *162 % of released** • *63 % of sub total*
GoN Total	**1,026,761,000** • *32% of sub total*	**995,224,250.56** • *97% of committed* • *50% of sub total*	**924,339,687** • *93 % of released* • *37 % of sub total*
Sub Total	**3,231,144,000**	**1,976,686,289.26**	**2,514,564,165.71**
Other Income	-	*17,375,360*	-
Grand Total	**3,231,144,000**	**1,994,061,648.86**	**2,514,564,165.71**

3.6 Progress on Credit Financing

MHPs:
The partner banks of ESAP II and NRREP, within and outside the Micro Hydro Debt Fund have done a reasonable job in terms of financing MHPs. So far, Clean Energy Development Bank has provided loan to 21 projects, amounting over Rs. 39 million. With this, 749 kilowatts have been generated and over 7,300 households have been electrified.

Similarly, Himalayan Bank has provided loan to 9 projects, amounting over Rs. 24 million. With this 356 kilowatts have been generated and over 3,200 households have been electrified. Banks like Nabil Bank and KIST Bank have also provided loans to 5 MHPs, amounting over Rs. 10 million, electrifying over 1,200 households and generating over 125 kilowatts.

Biogas:
Biogas Credit Fund was established in the year 2000 under the Alternative Energy Promotion Centre (AEPC) with grant support of about NRP. 234 million received from KFW and Technical Assistance from SNV/Nepal to the GoN. The credit fund will be provided to the MFIs which will further on lend to the biogas consumers. Total involved MFIs are 477 and by this reporting year around 26012 people befitted from the credit fund since its inception covering 49 districts. The following table highlights the overall situation of Biogas Credit Fund disbursement till end of Ashad, 2071 (16th July 30, 2014).

Particulars	Amount
Fund Received From KFW	NRs. 234 million
Total Loan Investment	NRs. 356 million
Total Loan Repayment	NRS. 323 million
Total Loan Outstanding	NRs. 33 million

3.7 Carbon Reduction Accounts

The value indicated, by any means, doesn't refer to the emission reduction (ER) that is tradable but is the synopsis of the potential emission reductions that are achieved due to the technology installation.

Table 9- Carbon Reduction Accounts

SN	Activities	Unit	Physical Achievements		Potential ER achieved (cumulative)
			Year-1	Year-2	tCO_2e/Year
1	Mini/Micro Hydro	kW	2,188	4,013	14,019
2	Improved Water Mill	Nos.	1256	362	9,962
3	Solar PV Home Systems and Small Solar PV Home	Nos.	99,324	87,038	24,407

SN	Activities	Unit	Physical Achievements		Potential ER achieved (cumulative)
			Year-1	Year-2	tCO_2 e/Year
	Systems				
4	Institutional Solar PV Systems and drinking water pumping systems	Nos.	66	131	
	Institutional Solar PV	Nos.	41	106	197
	Drinking water pumping set	Nos.	25	25	51
5	Solar Dryer	Nos	0	212	442
6	Mud ICS	Nos.	128,345	135,811	472,941
7	Metallic ICS	Nos.	3,806	5,060	16,529
8	Domestic Biogas Plants	Nos.	4,984	31,512	98,287
	Total				636,835

Estimated ER Factor

SN	*Activities*	*Unit*	*NRREP Target*	*Estimated ER factor tCO2 e/unit/year*
1	*Mini/Micro Hydro Power*	*kW*	*25,000*	*2.30*
2	*Improved Water Mill*	*Nos.*	*4000*	*3.65*
3	*Solar PV Home Systems and Small Solar PV Home Systems*	*Nos.*	*600,000*	*0.10*
4	*Institutional Solar PV Systems and drinking water pumping systems*	*Nos.*	*1550*	
	Institutional Solar PV	*Nos.*		*1.68*
	Solar Drinking Water System	*Nos.*		*0.88*
5	*Solar Dryer*	*Nos*	*500*	*6.26*
6	*Mud ICS*	*Nos.*	*475,000*	*1.535*
7	*Metallic ICS*	*Nos.*		*1.535*
8	*Domestic Biogas Plants*	*Nos.*	*130,000*	*3.00*
9	*Institutional/community Biogas Plants*	*Nos.*	*200*	*12.00*

4 Major Achievements and Accomplishments

4.1 Program Achievements on Immediate Objectives:

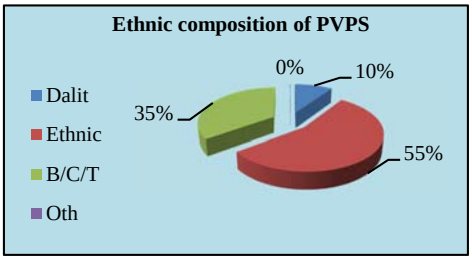
Immediate objective-1

To institute the CREF as the core financial institution responsible for the effective delivery of subsidies and credit support to the renewable energy sector.

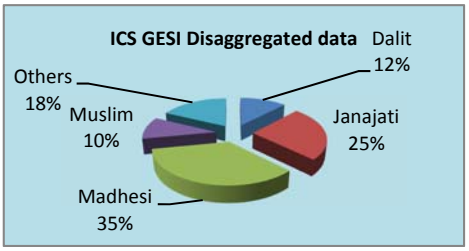
The CREF is institutionalized in the reporting year with establishment of financial management mechanism. The Investment Committee is formed and secretariat is equipped with professional staffs towards operationalization of the CREF. Further, the process to selecting handling bank and partner bank has been started.

Immediate objective-2

To accelerate renewable energy service delivery with better quality, comprising various technologies, to remote rural households, enterprises and communities, to benefit men and women from all social groups, leading to more equitable economic growth.

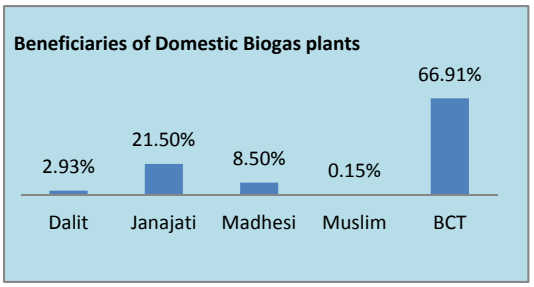


Solar Energy: In the reporting year, there are significant achievements in the areas of service delivery. As per the NRREP data base, 87,038 SSHS & SHS, 106 ISPS, 25 PVPS and 212 Solar dryer/cooker have been installed in the rural areas of Nepal benefiting large number of households belonging to different socio-economic categories. An analysis shows that a total of 88,408 (excluding ISPS) households are additionally benefited from solar technology of which 51% of male and 49 % female are benefited. In solar PVPS, 10% of Dalit and 55 % Ethnic, 35% BCT benefited from the program. In the area of solar technology, the AEPC/NRREP supported to capacitate local people for the technology promotion. A total of 120 people received Level-1 and 40 people received level -2 training in the reporting year. Please note that the LFA of Program document targeted to achieve at least 30% and 50% beneficiaries from disadvantaged group and female respectively.

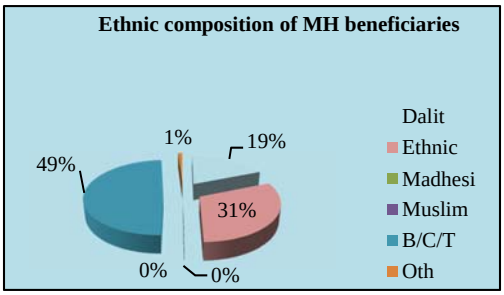


Solid Biomass Energy: In biomass energy sector, significant progress has been made in installation of 140,871 (including mud & metallic) improved cooking stoves throughout the country. Out of total of 5,060 MICS installed, 2,358 (47%) are owned by male and 2,702 (53%) are owned by female. Please note that the LFA of program document targeted to achieve 75% female ownership in the metallic ICS. Declaration of 28 IAP free VDCs and 2 IAP free IICS clusters are the remarkable milestone achieved.

Biogas: In the reported fiscal year Domestic Biogas installations were very satisfactory. A total of 31, 512 domestic biogas plants are supported by AEPC/NRREP in the reporting year. Approximately 17,000 of these biogas plants installed in last year that, due to late arrived subsidy applications were paid out this year. Out of the plants supported this year, 54.73% are owned by male and remaining 45.27% are owned by female. From ethnicity point of view, 2.93% by Dalit, 21.50% by Janajati, 8.50% by Madheshi, 0.15% by Mushlim and 66.91% by others (BCT,SW,DAG). Please note that the LFA of program document targeted to achieve 30% HH to be disadvantaged people. AEPC/NRREP managed to install more than the set targets and hence requested GoN to revise the set targets making from 26,000 to 30,000. Plant Rehabilitation and Efficiency Improvement Project (PREIP) successfully implemented in 9 districts under the support from KfW.



Community Electrification: During the reporting period altogether 42, 875 rural households have been electrified through 4,013.25 kW electricity generated from 253 numbers of new Micro/Pico Hydropower Projects being commissioned. A total of 209,230 people (42,875HH) benefited from the micro hydro in the reporting year out of which 51.44% are female. Average plant size of installed MHPs is found to be 32 kW that can be considered as significant success of past efforts. NRREP database shows that female participation in user's committee leadership position is about 10% including 23% in secretary position. Similarly, 781 Improved Water Mills have been installed from which 40,612 households (198,186 populations) have benefited. Please note that the LFA of program document targeted to achieve 50% women and 30% DAG during the program period. It is worth mentioning that 2302.77 kW out of the 4,013 kW of MHP commissioned this year are from projects supported with the subsidy from the ESAP Programme.



Institutional Support: With the aim to accelerate service delivery to the targeted people, AEPC/NRREP put utmost effort to improve sector policy in the reporting year. Significant policy and operational documents, especially with regards to fostering sectoral growth of Renewable Energy Sector have been prepared/ initiated by NRREP. Based on the conceptual framework of GoN's 13th Three Year Plan with strategic objective of providing energy access to as much as 87% of the population, AEPC upon request from the National Planning Commission prepared 13th Three Year Renewable Energy Sector Plan with details of RET targets and road maps to achieve the stated targets in the plan. Preparation of Renewable Energy Policy, preparation of Nepal's 20 years perspective plan, preparations for the revision process of Renewable Energy Subsidy Policy are other significant achievements of the reporting year. Towards improving management aspects of the organization, government's Public Procurement Act and Public Procurement Rules have been incorporated in the Programme's guidelines. Also the AEPC SoD with its translated document has been finalized and forwarded to the ministry for the necessary endorsement. Capacity building of

AEPC staff through various training and exposures is another building block of institutional development in the reporting year.

Climate Change and Carbon: In line with the NRREP output for CCU which states "CDM and carbon market instruments are functional and generate revenue", CCU managed this year, to secure a total revenue of USD 1.99 million attributable to the four Biogas Project Activities (PA-1,PA-2,PA-3 and PA-4) registered with UNFCCC CDM EB. The project activities generated a total 284,423 tons of CO_2 equivalent emission reductions during the verification vintage of 2009/10 to 2011/12. Further, the success entailed with CCU was also with the registration of the Biogas PoA and inclusion of three CPAs into it. Biogas PoA was registered with the start date of 31 January 2013 while the date of registration action was 24 September 2013. Having the PoA registration and CPA inclusion in place AEPC has 139,323 tons of CO_2 equivalent emission reductions available for trading under the Clean Development Mechanism in the next fiscal year.

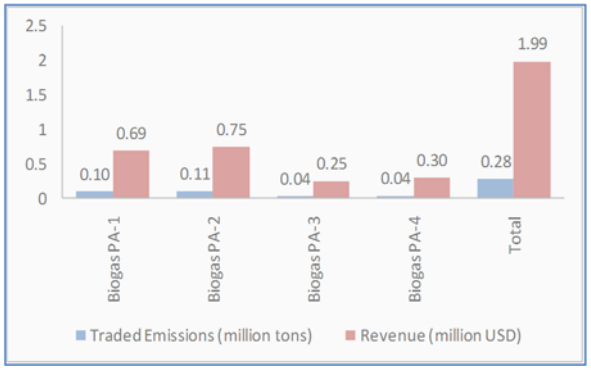


Figure-1: Synopsis of emission reduction units achieved and revenue received in FY 2013/14

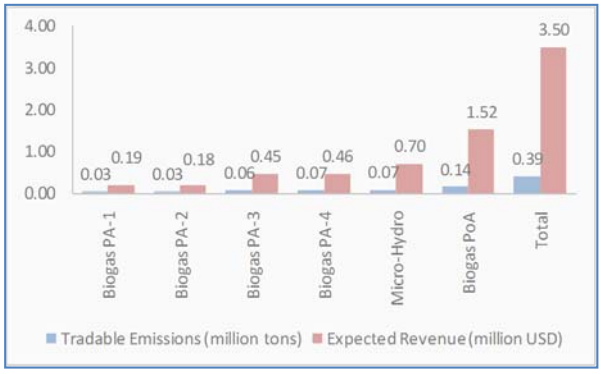


Figure-2: Expected amount of tradable CERs and estimate of corresponding revenue for FY 2014/15

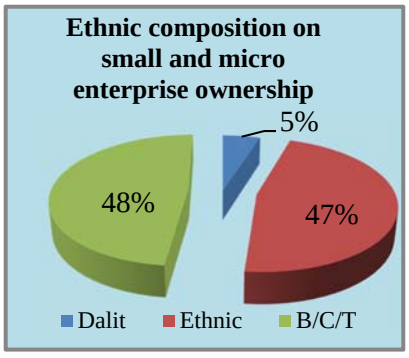
Monitoring and Quality Assurance: In the reporting year, the AEPC/NRREP obtained significant improvements toward bringing effectiveness in the program implementation. Baseline of NRREP successfully finalized, published and disseminated. The baseline report has focused to establish baseline data of RE sector's contribution to National development indicators as well as updating of RE statistics till 15 July 2012. A culture of result based management approaches has been established at all levels of the NRREP, particularly in the program planning, implementation, monitoring and reporting systems. Significant progress is achieved towards establishing web based database in all technical components and its further integration into the central MIS of AEPC/NRREP. Once its entire works completes (in few months), the AEPC/NRREP is expected to enter into the modern age in managing organizational data using advanced data management technologies. Similarly, the AEPC/NRREP has started to execute all monitoring works through MQA unit in an integrated manner, which is one of the major strategic shifts obtained in the reporting year. With the aim to improve the quality of program intervention at local level, more than 200 working staffs (including partner organization) are capacitated in the areas of basic understanding of Quality Assurance & Quality Control (QA/QC) aspects.

Gender Equality and Social Inclusion: All the RET services rendered through RSC/NSPs, DDC and private sectors under the NRREP is mandated for GESI responsiveness, which is the major success of the reporting year. In this context, AEPC/NRREP vividly involved to make it possible. Development and operationalization of vital GESI tools and techniques such as mainstreaming plan, GESI mainstreaming toolbox, GESI audit guideline, gap identification etc. are some of the significant successes of the year. Development and operationalization of GESI disintegrated data base system and mainstreaming GESI responsive planning, monitoring and reporting systems are other vital successes achieved in the year. A special program package was designed to working with right holders' organizations to reach the grassroots level beneficiaries through orientation and sensitization. At the first time, GESI audit of the AEPC/NRREP is carried out to establish bench mark on the GESI database. With the aim to improve the access to information of remote people, a jingle message has been designed on "RET for GESI" and aired through national media. Publication of GESI knowledge products and widespread distribution to all relevant stakeholders has helped to further strengthening GESI approaches into the program.

Local Body Coordination and Outreach Management: Local Body Coordination and Outreach Management of AEPC/NRREP is instituted aiming to localize RET services through local body coordination. In line with it, AEPC is constantly facilitating / coordinating and collaborating with various national, regional and local level stakeholders for expansion and broad based renewable energy technologies service promotion. AEPC/NRREP has been providing technical, administrative, management and process support to 9 Regional Service Centers, 2 National Service Providers and 75 District Environment Energy and Climate Change Sections (DEECCS) to make them vibrate in RET service delivery with close consultation and within the target framework of AEPC. This year was very much successful in the internalizing the previous District Energy and Energy Units (DEEUs) into the new DEECCS in all DDCs. Recently, efforts have been converging towards integrating RET demand creation through local planning process, hence more precisely working to established functional linkages between RSCs and DDCs.

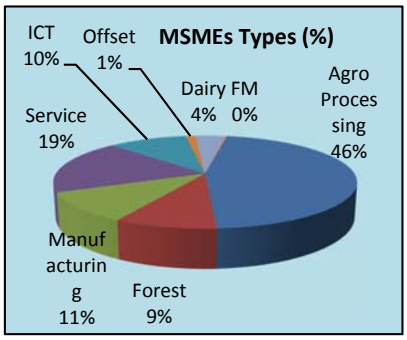
Immediate objective-3

To contribute to an increase in income generation potential for micro, small and medium sized enterprises (MSME) in rural areas, particularly for men and women belonging to socially and economically disadvantaged groups.

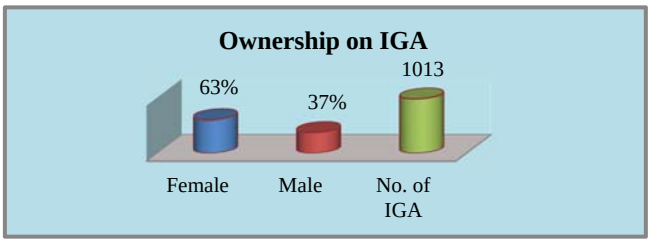


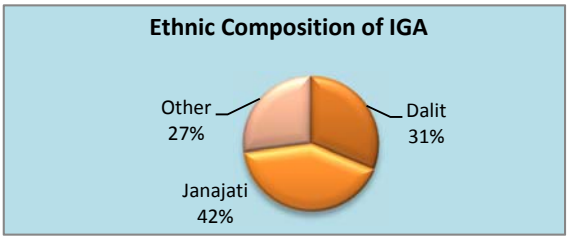
Establishment of Business Promotion unit in each RSCs and approval of MSME and IGA strategy and guideline are among the major successess towards contributing an increase income generation potential for micro, small and medium sized enterprises (MSME) in rural areas. A total of 171 Local Economic development Committee (LEDC) are formed in the respective potential MHP catchment areas. Similarly District project Review Committees (DPRC) are formed in 22 districts and Business Proposal review Committee (BPRC) at center level. NRREP has appraised and forwarded business plans for 381 MSMEs for

releasing first installment (90%) subsidy through REF. Out of which, 300 business plans were approved from REF followed by release of respective amount of subsidy. Out of total MSMEs, 77% are owned by male and 23% owned by female. Out of the total MSME, 47% belongs to ethnic/indigenous people, 5% belong to Dalits and rest to upper caste from ethnicity perspective. According to the LFA of the program document, the program target is 25 % of new MSMEs to be owned and run by women and DAG.



Income Generation Activity (IGA) development is another success of the year to highlight on. A total of 1013 no of IGA plans are developed apprised, and approved





for the establishment support. Out of total IGAs, 63% are owned by female and 37% owned by male. Out of the total IGAs, 42% belong to ethnic/indigenous people, 31% belong to Dalits and rest to upper caste from ethnicity perspective. According to LFA of program document, the program target is at least 50% of supported HH must be belonging to women and DAG.

4.2 Component/Sub component/Unit wise Major Accomplishments:

4.2.1 Central Renewable Energy Fund Component:

- CREF's Investment Committee has been established.
- The Secretariat has been established with staff.
- 18 banks have been shortlisted for RFP process. One bank will be selected as Handling Bank and 10 banks will be selected as Partner Banks.
- Orientation on the Financial Management Mechanism has been done to all 18 banks
- Orientation on REF's existing Subsidy Management procedure has been done
- The consultant who will evaluate the proposals has been hired by Danida

4.2.2 Biogas Energy Sub Component:

Domestic Biogas

- New database system installed and operationalized, and online subsidy application system introduced.
- Piloting of the mobile data capture of some of the plants under PREIP making breakthrough in using modern technology to monitor and reporting of plants via a mobile phone

- Established a call center to register complaints from Biogas Users. This process was started from Bhadra 30, 2070.
- Completed Design Modification of SGBP and its performance testing of piloted systems.
- Rehabilitated 28, 070 old biogas plants under PREIP project in 9 districts.
- Piloted four numbers of Fiber Reinforced Plastic Biogas plants and result analyzed. Initial discussion on up scaling this technology started with Asian Development Bank.
- A MoU with WWF has been signed for selling the carbon for installed biogas plants in voluntary market in buffer zone areas of National Park Areas.
- AEPC has approved and implemented the third party monitoring guideleine.

Large Biogas Plant Progress in this FY

- Feasibility Study Guidelines and Report Formats, Detailed Feasibility Study Guidelines and Project Operational Manuals have been prepared.
- Environment Management Framework (EMF) and Social Management Framework (SMF) have been prepared and disclosed in AEPC Website for environmental and social due diligence of large biogas plants.
- Biogas Plant Commissioning, Testing and 1 Year Guarantee Monitoring Guidelines has been prepared.
- Feasibility Study/Detailed Feasibility Study Training organized for prequalified Consulting Firms.
- ESMF Clinic organized for prequalified Consulting Firms.
- To install the large biogas plants from 68 technical work forces of 34 large biogas installing companies were trained on large biogas construction in three different locations of the country.
- Waste to Energy Website (http://www.w2ebazaar.org.np) has been launched.
- A prototype design of large biogas plants up to 35 m3 has been developed for large Biogas System construction.
- Project Awarded for the Call for study "Conduction of Feasibility study for usage of Biogas in Transport Vehicles (Sajha Bus)
- 33 large biogas plants are under construction in different region of Nepal.

4.2.3 Biomass Energy Sub Component

- Approved BESC Service Delivery Guideline under DDC-led modality and shared to all DDCs.
- Redesign of MIS Database and Users Acceptance Testing (UAT) completed
- Conducted 7 nos of ToT for District Coordinators and Local Social Mobilizers of RSCs and DSCs.
- Conducted 52 nos of Basic level training to business groups.
- Selected DSC and DSC staff in of 46 districts out of 49 districts through DDC/EECCSs for ICS promotion.
- Conducted 2,035 numbers of Cluster level behavior change workshops.
- Organized 699 numbers of VDC Level consultative workshop and action committee formed.
- Declared 28 number of VDCs as IAP Free VDCs and declared 2 number of IICS clusters
- Conducted ICS design workshop in Kathmandu, with total of 50 participants, including 8 female & 42 male.

- Printed and disseminated 290,000 copies of ICS users' manual for Mid hills and Terai with revision of GESI requirements, 25,000 copies of Subsidy Application Forms (SAFs) for MICS and 5,000 copies of Stove Masters' Manual
- Celebrated 1st Annual day of NACC on 10th July, with total of 160 participants, including 30 female & 130 male
- Conducted BEST Scenario workshop on 13-14 January 2014 in Dhulikhel.
- Conducted Research, Development and Testing of new composite model with metallic liner ICS and testing completed.
- Conducted International Stove Design and Performance Testing Workshop on 9-13 Sept 2013 in RETs Khumaltar.
- Conducted 4th Lot of MICS third party monitoring through two consulting firms
- Conducted verification of deviated cased found after third party monitoring of 3rd lot of MICS.
- Conducted Review Workshop on Strategic, Operational and Technological aspect of BETs to EECCS/EEOs
- Conducted feasibility study for potential site identification and piloting of biomass gasifier technology for electricity generation in rural community of mid and far western Terai regions.
- Conducted detailed feasibility study of identified potential sites for biomass gasifier electrification in rural communities of Tanahun and Rautahat districts.
- Installer selected for the Supply, Installation and Commissioning of Electro-mechanical Components of 11 kW Biomass Gasifier Electrification System at Hansipur, Dang through National Competitive Bidding process.
- Conducted study on Feasibility & Market Identification of Densified Biomass Briquettes.
- Conducted study for identification and documentation of micro, small and medium scale enterprises using solid biomass intensive combustion technologies for cooking, heating and thermal processes.
- Conducted biomass densification training to participants from four rural communities for entrepreneurship development and supported for establishment of demonstration unit at Osho Tapoban premises.
- Design, installation and piloting of institutional improved cooking stoves at Pashupati Briddhashram completed.
- Conducted BETs related studies in collaboration with academic institutions through support for conduction of three Student Thesis and research work.
- Conducted Biomass Cook stove Design Competition in collaboration with ICIMOD. Altogether 23 stove models are selected from second level of screening and the selected stoves are in the process of testing at RETS/NAST)

4.2.4 Solar Energy Sub Component

- Navision database for subsidy has been upgraded to NAV 2013 R2. Testing and commissioning of subsidy database is completed, refresher training given to PQ companies on online subsidy database. Similarly, for solar thermal system, online subsidy application form processing has been developed.
-

- AEPC with the support from KFW procured 6 Battery testing branches to enhance the existing Battery testing facilities at RE test stations.
- Complete database of Renewable Energy Test Station (RETS) passed and failed products of SHS have been established.
- Selected 348 schools, FM radio and health posts for detail feasibility study of ISPS.
- Concluded Quality Assurance & Monitoring of 10,481 SHS.
- 49 numbers of new PVPS projects are approved by Photovoltaic technical committee.
- Successful completed the piloting of industrial scale solar dryer for Lapsi candies drying with real time performance monitoring system.
- SESC conducted various technical training to 285 participants in the year.
- As promotion of use of solar dryers and cookers, five government schools of five development regions are provided dryers and cookers.

4.2.5 Community Electrification Sub Component

- Completed T &C of more than 4 MW MHP/PHP done
- Completed PQ of MHP Survey consulting firms and MHP installer companies
- Completed PQ of IWM LPO and kit manufacturers companies
- Updated and printed MHP/PHP related standard, guidelines
- Provided NRs. 30 Million additional Financial Supports to 83 MHPs (3,125kW).
- Completed preparation of Micro Hydro Detailed Feasibility appraisal through web based platform.
- Held a policy discussion on "Integration of off-grid and on -grid electrification in Nepal: Challenges and Prospects.
- Continued collaboration with KUTTL for Turbine testing
- Completed a guideline for selecting consulting services for carrying out DFS of MHP.
- Completed MHP procurement guidelines.
- Completed CE Project approval process
- Developed Guidelines for Co-operative Model of Mini/Micro Hydro Projects
- Developed an implementation Guidelines for IWM

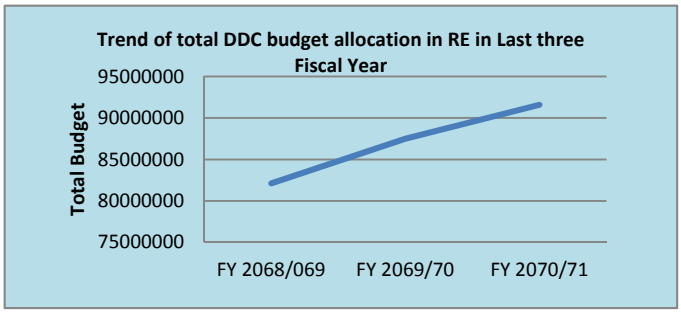
Table 9. Number of MHPs by Status:

S. No.	MHPs by Status as of 2013/14	No. of Projects	kW	Beneficiaries Households
1	**Completed Projects**			
a	Project Commissioned - MHPs	110	3486	36,068
b	Project Commissioned - PHPs	143	527.25	6,807
	Total	**253**	**4,013.25**	**42,875**
2	**Ongoing Micro Hydro Projects**			
a	DFS Completed Projects	58	2,614	20,258
b	TRC/Conditionally Approved Projects	89	4000	35,047
c	Final Approval (Under Construction)	44	1,645	16,167

Projects			
Total	**191**	**8,259**	**71,472**

4.2.6 Outreach and Local Governance Subcomponent

- Internalized DEECCS into the permanent structure of the DDCs through the Environvental Friendly Local Government (EFLG) framework of Ministry of Federal Affairs and Local Government (MOFALD). Linking with EFLG, Operation guideline of DEECCS and its TOR has been approved from MOFALD. DEECCS also works as a secretariat of EFLG. The guideline has mentioned that the operational support will be continued from AEPC up to the first 3 years by 100% (effective from FY 2071/072) and during fourth and fifth year by 50% (total 5 years) and after that the full operation cost will be carried over by respective DDC.
- DDC and RSCs joint RET planning process practiced in 18 DDCs; Ilam, Taplejung, Panchthar, Sarlahi, Morang, Saptari, Kavre, Okhaldhunga, Tanahun, Lamjung, Myagdi, Baglung, Dang, Rukum, Surkhet, Jajarkot, Doti and Bajura.
- Organized two consultative workshops in Nepalgunj and Pokhara with the participants from 3 RSCs (Team leader and Chairperson) and 12 DDCs (including DEECCS Officer, Planning Officer and Program Officer) in each event to strengthen the functional linkage between RSCs and DDCs.
- Coordinated to conduct random monitoring of RETs through DEECCSs for Lot 2, Lot 3. All the received reports have been forwarded to MQA team for necessary action.
- Established two separate online planning and monitoring software solutions to plan, track and monitor the performance of RSCs and DEECCSs (www.rasmonitoring.org.np & www.deeccsmonitoring.org.np).
- Coordinated for contract agreement with AEPC and 49 DDCs (DSC selection in 46 districts) for the implementation of Biomass related activities in local level through DDC.
- Conducted resource investment trend analysis of all 75 DDC on RE during last three FY (2068/069, 2069/070 and 2070/071). The study shows the increasing trend in the resource allocation in RE from DDCs with continuous lobby from DEECCSs staff.
- RET chapter with prime focus has been included in the Local Body Planning Guideline and also been reflected in planning templates.



- Increased internalization of renewable energy agenda by DDCs. Examples are- celebration of renewable energy week, increased resource allocation, declaration of IAP free districts and VDCs, random monitoring etc.
- RSCs have 335 approved staff positions in total, of which staff turnover is just 9% (31 staffs). Now, all the vacant positions have been fulfilled through the support from the Outreach Sub-component.

- RSCs have been increasingly aligned in results based management and Outreach has focused on achievement of physical targets besides fulfilling requirements for milestones and financial progress.
- Draft District Climate and Energy Plan reports of 25 districts have been received. DEECCS have been heavily involved in the primary data collection from VDC level and secondary data collection from District level.
- Other accomplishments include: Feasibility study of Energy Hubs, started preparation of communication strategy for AEPC/NRREP, produced integrated IEC material for information dissemination of RETs..

4.2.7 Institutional Support Sub-Component

- Completed the preparation of 13th Three Year Renewable Energy Sector Plan (2013/14-2015/16) as a part of the GoN's Three Year Plan.
- Completed Annual Progress Review of AEPC 2012/13 that encompass all the accomplishments made by AEPC through its programme including NRREP for FY 2012/13.
- Completed the Performance Gap Assessment of AEPC staff in order to identify the effective capacity intervention activities
- Completed compilation and finalization of revised Annual Work Plan and Budget of NRREP 2013/14. Some of the activities were either adjusted or budget shuffled amongst the NRREP component/units.
- NRREP Administrative & Financial Guideline revised to accommodate some imperative needs especially regarding Grant Support for Research and Development activities
- Completed drafting and preparing agenda and documents for Steering Committee meetings of NRREP.
- Under the capacity building activities, 16 number of AEPC/NRREP staffs were supported to participate in in-house Advanced Excel Training and similarly 7 AEPC/NRREP staff were recommended.
- Provided technical support in the finalization of District Climate and Energy Plan (DCEP) preparation guidelines and supported in the selection of consultants for the preparation of DCEP for 25 districts across Nepal.
- Completed the preparation of Roles and Responsibilities of RSC and DEEUs with the support of expert consultant.
- Completed the finalization of SOD of AEPC and initiated to translate from the previous English version to Nepali with the support of external consultant.
- Started preparing of Renewable Energy Policy, which is envisaged to be more comprehensive and GESI responsive in comparing to existing Rural Energy Policy 2006. The final draft is ready and waiting to be discussed with larger group of stakeholders
- Initiated the preparation Nepal's Twenty Years Perspective Plan; ToR preparation has been completed and is currently in the process of seeking management approval for further course of actions to be taken.

4.2.8 Monitoring and Quality Assurance Unit

- Baseline of NRREP successfully finalized, published and disseminated.
- Carried out Random monitoring of subsidized RETs in all 75 districts. Series of monitoring reports submitted to management and the management took penalty actions in few seriously deviated cases.
- A culture of Result based management approaches introduced into NRREP's planning, implementation, and reporting systems as envisioned by the program document.
- Annual set milestones have been achieved in the development process of central MIS of AEPC/NRREP. Supported to all technical components in establishing web based database.
- Prepared POV procedural guideline and completed Power output verification of 48 MH projects as planned.
- Carried out 4 monitoring visits in Kanchanpur, Syangja, Doti and Kavre districts and report provided to management.
- Trained 200 working staffs (including partner organization) in the areas of basic understanding of Quality Assurance & Quality Control (QA/QC) aspects.
- Coordinated to prepare 2069/70 annual report and 2070/71 trimester reports of NRREP.
- Started to implement integrated monitoring system which is one of major strategic shift of AEPC/NRREP.
- Provided RET data (subsidy database) from the date 16 July 2012 to 15 March 2014 to all 75 districts.
- Trained 75 DEEUs staff on random monitoring and M&E systems.
- Developed and maintained a Trimester progress tracking system of NRREP.
- Supported to other components/subcomponents and unit to strengthen Monitoring, record keeping and reporting systems.

4.2.9 Climate Change and Carbon Unit

- ERPA for the IWM PoA is concluded with the Asian Development Bank's Future Carbon Fund (ADB/FCF) for the purchase of 75,000 tons of CO_2 equivalent of emission reductions attributable to IWM PoA. Similarly, ERPA amendment for the Biogas PoA (including the replacement of KfW by atmosfair) is also concluded.
- Issuance of the Certified Emission Reductions (CERs) for the Biogas CDM Project activities (PA-1,PA-2,PA-3 and PA-4) is achieved in this fiscal year. A total of 284,423 tons of CO_2 emission reductions were verified and corresponding revenue of 1.99 million USD have been received. In addition to the issuance, post registration changes (PRC) for the Biogas Project Activity-3 and Biogas Project Activity-4 are approved by the CDM executive board.
- Inclusion, Validation, Monitoring and Verification:
  - Three CPAs (CPA-2, CPA-3 and CPA-4) are successfully included in the Biogas PoA on 8 May 2014. The validating DOE for this activity was KBS certification. The three CPAs collectively include 59,856 digesters with total annual CER generation potential of 198,962 tons of CO_2

equivalent. Synopsis of digesters included in the CPA-2, CPA-3 and CPA-4 according to district is annexed (annex 7.7) with this report.

- Designated Operational Entities (DOEs) for the verification of the Biogas PoA and inclusion of CPA-5 in Biogas PoA. Tuv Nord and KBS certification have been selected for the aforementioned assignments respectively. DOEs have completed the on-site verification for the Biogas Project Activities (PA-1,PA-2,PA-3 and PA-4), Micro Hydro verification and Inclusion of CPA-5 in Biogas PoA.
- Monitoring of the Biogas Project Activities (PA-1, PA-2, PA-3 and PA-4), Biogas Program of Activities (CPA-1, CPA-2, CPA-3 and CPA-4), and Improved Cook stove PoA and Improved Water Mills PoA was concluded in this fiscal year. Similarly, the monitoring reports for the Biogas PoA have been prepared and communicated to the verifying DOE.
- ICS PoA and IWM PoA are requested for registration with the CDM executive board in this fiscal year.

- As a part of regular reporting to the World Bank, reports entitled "Social and Environmental safeguards monitoring survey for the MHPs bundled as CDM project", "Final Borrowers Completion Report (BCR) for the Micro-hydro" and "Implementation Completion Report (ICR) for the Biogas project activities" have been submitted to the World Bank.
- Preparation of District Climate and Energy Plan (DCEP) in 25 districts (5 clusters) was initiated in this fiscal year.
- The final draft of the Low Carbon Economic Development strategy has been developed, and the same is communicated to respective ministries for review.

4.2.10 Gender Equality and Social Inclusion Unit

- Two research on impact case studies on Micro hydro and Solar Water-pumping has been completed.
- 2000 copies of each GESI mainstreaming toolbox, GESI Audit guideline and social mobilization guideline have been published and distributed to all relevant stakeholders.
- Right to Information (RTI) training has been conducted to managers, advisors and program officers of AEPC/NRREP. Two days GESI orientation training was also conducted to GESI/M&QA/ID officers of all RSCs for the internalization and train other executive bodies of RET promotion under AEPC/NRREP. A 5 days TOT on GESI mainstreaming was conducted to GESI focal points from all components of AEPC/NRREP and GESI/M&QA/ID officers from RSCs.
- 2 days training on GESI mainstreaming strategy was conducted to the executive members of 63 MH UCs through 7 RSCs (NCDC, DCRDC, ASTHA, BASE, RDSC, SCDC and REMREC). Total of 2205 Executive members including more than 50% women participated in the programme.
- Supported to draft LGCDP/MOFALD Training Resource Book (chapter 8) in the past. As its effects, the LGCDP has conducted training to the DDC, VDC and social mobilizers in Dadeldura, Argakhachi, Phyuthan, Ramechhap and Dhankuta districts by adopting those manuals.
- Worked with different right holder's organizations (RHOs) to increase their energy access by the targeted community group. NGO-FION, NEFDIN and FEDO are the organizations having regular meeting with GESI unit and oriented 2 days on RET service mechanism to enhance the linkages and coordination at the district level. Grant support provided to NGO-FION to assist AEPC/NRREP orientation program to indigenous nationalities from 12 VDCs of 10 districts. FEDO

district level chapters were involving in the promotion of ICS, biogas and solar technology promotion to their members.

4.2.11 Business Development for Renewable Energy and Productive Energy Use Component

- Business Promotion Units (BPUs) have been established in each RSC with Business Promotion Officers (BPOs), Enterprise and Livelihood Officers (ELOs) and Local Enterprise Development Facilitators (LEDFs).
- Till the date, SYIB training conducted in 18 catchments and 42 SMEs are registered in CSIDB district office.
- NRREP's MSME and IGA guidelines and strategies approved and implemented.
- Business Proposal Review Committee (BPRC) is formed at central level to appraise business plans for medium, small and micro (community-based) enterprises forwarded by RSCs.
- District-level Project Review Committee (DPRC) are formed in 22 districts for appraising and endorsing business plans of micro enterprises
- Local Economic Development (LED) committees are formed in 171 MHPs.
- 46 numbers of entrepreneurship and skill development trainings are conducted through RSCs benefitting about 20 participants per training.
- 392 business plans are appraised and approved from BPRC and DPRC.
- Two Business Development Service Providing Organizations (BDSPOs) have been hired for establishment of 75 Small and Medium Enterprises in MHP catchment areas
- Business Plan Competition was conducted in which 26 innovative entrepreneur's business plans were selected for potential piloting. Out of them, 6 were finally selected and approved by BPRC for piloting.
- ToT for 9 BPOs and 19 ELOs were conducted for effective implementation of PEU approaches and activities in RETS catchment areas. Similarly LEDFs were oriented for increasing their efficiency.
- More than 300 linkages established between entrepreneurs and potential BDS providers for increased outreach of BDS services.
- 2 number of business management trainings were conducted (in Dhulikhel and Surkhet) for 48 prospective and existing entrepreneurs in coordination with respective RSCs
- Updated PEU's catalogue and translated in Nepali language.
- Following two studies are completed and the output shared with RSCs:
  - Assessment of business opportunities in areas electrified by renewable energy technologies and feasibility study of energy intervention in Lokta handmade paper product
  - Exploring Local and District Level Organizations/ Firms Providing Business Development Services required for MSMEs
- MoU signed with NTNC, WUPAP, and Practical Action for effective implementation of activities in overlapping areas.

4.3 Major documentation and publication

AEPC as a public institution always aims to maintain transparency and inform its stakeholders through different means of communication. For the purpose of knowledge sharing AEPC has published various data books, guidelines manuals, Booklets etc. AEPC has started the system of uploading all reports and publications produced by AEPC/NRREP in AEPC website (www.aepc.gov.np) when it happens.

Followings are the few major publications published in the reporting period:

SN	Name of the Publications
1	Annual Progress Overview of AEPC 2012/013
2	NRREP Baseline Part A: Baseline of NRREP Result Areas linked with National Development Indicators
3	NRREP Baseline Part B: Baseline of Renewable Energy Technology Installation in Nepal
4	AEPC/NRREP Booklet
5	Renewable Energy Photo Journal
6	Gender Equality and Social Inclusion Toolbox
7	Social Mobilization Guideline 2070
8	Gender Equality and Social Inclusion Audit Guideline
9	Large Biogas Plant Project Feasibility study Guideline 2014
10	Large Biogas Plant Project Detail Feasibility study Guideline 2014
11	Large Biogas Plant project Construction Manual 2014
12	Biogas Calculation tool Users' Guide 2014
13	Strategy and Guideline for Promotion of Income Generation Activities (IGA)
14	Implementation Strategy and Working Guidelines for Promotion of MSMEs
15	Briquette Production and Users Training Manual
16	Guideline for Detail Feasibility Study of MHP
17	Reference MHP Standard
18	Construction and Installation Manual for MHP Installers
19	Improved Cook Stove User Manual
20	Stove masters Manual
21	Service Delivery Guideline for DDC/EECCS

4.4 Monitoring and Field verification results:

4.4.1 Third Party Monitoring:

Technology	Total Systems in FY 2012/13 (No)	Total systems selected	Total monitored systems (No)	Total deviated systems (No)	Deviated (%)	Action Taken
Biogas	4,984	95	95	23	24%	Compensation

Biomass (MICS)	3,806	335	335	Yet to be finalized	Yet to be finalized	Yet to be finalized
*Solar	99,324	0	0	0	0	0
MHPs/PHPs	89	89	62	13	21%	Process initiated to recover penalty from deviated systems
MSMEs	24	24	24	0	0	Remaining 10% of the revolving fund was released
Note: Solar Third party monitoring of F/Y 2010/2011 to 2011/12 was carried out in the reporting year. Following is the monitoring results of solar technology-						
**Solar Third party monitoring of F/Y 2010/2011 to 2011/12*	*104,581*	*10,481*	*10,481*	*167*	*1.6%*	*Total amount of compensation levied is NRs. 50,295,006*

4.4.2 Random monitoring results

Sn	RE system	Monitored RE systems in FY 2012/13 and 2013/14	Deviated cases	%	Action Taken
1	Solar home system	365	154	42%	Solar sub-component initiated to re-verify the deviated cases for the penalty.
2	Pico/micro hydro	86	17	20%	CE sub-component initiated to re-verify the deviated cases for the penalty.
3	Household biogas plant	110	7	6%	Biogas sub-component initiated to re-verify the deviated cases for the penalty. The installer company (Khaptad Biogas) has been penalized NRS. 400,000 as a start.
4	Improved cook stove	234	57	24%	Biomass sub component initiated to re-verify the deviated cases for the penalty.

4.5 Organization and Human resource status

4.5.1 Policies/Strategies/Guidelines

NRREP recognizes that the ability to fulfill its AEPC/NRRP objective and strategic plan relies on fostering an environment which develops the organizational efficiency and maintains the highest quality standards in obtaining its targets and objectives. In this contexts, following policies/strategies and guidelines have been prepared or in the stage of preparation.

List of guidelines prepared, approved and initiated:

I. 13th Three Year Renewable Energy Sector Plan (Completed)
II. Renewable Energy Policy (Final Review and Consultative Stage)
III. Strategic Organization Development Plan of AEPC (Completed and Forwarded to Ministry)
IV. Renewable Energy Subsidy Plan Revision Process (Initiated)
V. NRREP Administration and Financial Guideline (Revised)
VI. Preparation of Roles and Responsibilities of RSCs and DEEUs(Completed)
VII. Performance Gap Assessment of AEPC Staff (Completed)

4.5.2 Organizational Structure and HR status

There is a common understanding that the organizational structure of AEPC needs revision. The instrument for revising the structure is SOD, which is informed by systematic functional analysis. AEPC/NRREP has completed revision of SOD and forwarded to ministry for approval.

There is 136 staff currently working in the AEPC/NRREP. Out of that, 41 are AEPC staffs working for NRREP in 8 contracted staff. Out of total staff, 95 are sole NRREP staff including 44 consultants. An analysis shows that 28% AEPC/NRREP staff are female.

4.6 Compliance:

As envisioned in the programme document Compliance Unit has been used to bring to light of the information and evidence if NRREP is running under approved and agreed norms, rules, regulations, procedures and laws. It has been a tool for the quality assurance of NRREP Financial Management, Planning, Adopted Processes, Implementation and Control Systems. Implementation of NRREP activities with zero tolerance level of corruption; maintenance & improvement of efficiency and effectiveness of systems and feedback & follow–up for the corrective measures have been in the focus of Compliance Audit. Compliance Unit has also been the regular source of information for NRREP Management, Development Partners and Steering Committee. Compliance Unit has been a tool of NRREP for:

- establishing, maintaining and promoting efficiency and effectiveness in NRREP activities/systems;

- adding value for money and good governance through corrective measures, improved operations, systematic approach, risk management and controlled processes and systems'
- follow up for corrective measures to get final solutions in systems and processes;
- communicating concerned parties of NRREP for the corrections of deficiencies in systems/processes/implementation;
- capacity building of the parties / agents / staff involved in NRREP activities

And in the above context, the following important tasks of Compliance Unit are worth to mention.

- Review and Monitoring of utilization of subsidy in various Renewable Energy Technologies
- Compliance Unit opinions and comments to NRREP management about the rules, regulations and procedures on day to day basis.
- Successfully delivered the responsibility of CREF Working Group for the establishment of CREF – Investment Committee on 13th December 2013. After the establishment of CREF Investment Committee, Compliance Unit was assigned the job to function as CREF Investment Committee – Interim Secretariat. As Interim Secretariat, Compliance Unit successfully managed to establish permanent CREF IC Secretariat by the recruitment of provisioned CREF IC Secretariat Staff from 1st April 2014. Compliance Unit handed over the remaining important jobs of establishing CREF Financial Management Mechanism to CREF IC Secretariat along with the announcement of Expression of Interest for CREF Handling and Partner Banks.
- Advisory services to NRREP Management, Stakeholders and Service Providers on varieties of issues – for maintaining the compliance in NRREP activities.
- NRREP management also received very good support from Compliance Unit- in the recruitment of competent staff.
- Contribution in the timely updates of NRREP Administrative and Financial Guidelines
- Conduction of various seminar, workshop and trainings on Procurement System/Process.
- Establishment of Procurement Unit.
- Initiation of E-procurement System.
- Facilitation to adopt Public Procurement Act and Public Procurement Rules.
- the development and implementation of TA Pool Guideline
- smooth, efficient and effective operation of NRREP Programme,
- The role of whistle blower for the compliance of norms, rules and regulations agreed between GoN and Development Partners.
- encouraging the World Bank to adopt GoN Public Procurement Act and Public Procurement Rules
- Encouraging the World Bank to align their Technical Support with NRREP Framework.

4.7 Coordination/Collaboration with other agencies

- AEPC/NRREP carried out various coordinating efforts with relevant cross sector agencies for the development and promotion of renewable energy sector. Significant progress has been achieved towards mainstreaming GESI and RETS information system through other cross sector agencies such as MOFALD, FION, NEFDIN, NORAD, MOSTE, NITC etc.

- AEPC together with Federation of Nepal Cottage and Small Industries organized "Renewable Energy Week 2014" and "12th National Industrial Trade Fair & Cottage Industry Festival" from 6-12th February 2014 in Kathmandu valley and at district level.
- AEPC together with ADB organized a Workshop on Best Practices and Business Opportunities for Scaled up Renewable Energy for Thermal Applications on 5-6 March 2014 at Kathmandu.
- AEPC in partnership with ADB organized Energy for All Investor Forum 2014 on 7 March 2014 in Kathmandu. The objectives of the forum were to allow entrepreneurs working in the energy access sector in Nepal to present their company as an investment opportunity to investors, banks and other stakeholders and to attract private sector investment to support the expansion of an energy access enterprise's operations and increase its impact.
- AEPC together with Water and Energy Commission's Secretariat (WECS) and other relevant organizations including government agencies, INGOs, NGOs, private sectors, academia, media houses organized Nepal National Water Week - 2014 (NNWW-2014) from 17 to 23 March 2014 with theme Water and Energy Nexus on occasion of the World Water Day and World Meteorological Day.
- MoUs have been signed with FNCSI and Practical action to promote RE technologies.

4.8 Major deviation of key activities and adjustment plan

Major deviations of key activities	Reasons for deviations	Adjustment plan
Feasibility study of Energy Hubs could not be completed	Outreach initiated this task after getting the final approval of the revised AWP of 2013/014, so could not complete the task. Consulting agency has submitted the draft report.	Outreach has proposed the budget even in the coming FY as the deadline of assignment is 30 July, 2014.
Communication Strategy could not be prepared	Outreach initiated after getting the final approval of the revised AWP of 2013/014, so could not complete the task. Consulting agency has submitted the inception report. Moreover, the selected consultant proposed some new methodologies beyond the ToR which are crucial for good strategy and effective implementation.	As this activity is being carried out, the budget has been proposed also in AWP 2014/015.
Community and Institutional Biogas Plants were not reported for subsidy delivery.	Finalization of Design, preparation of construction manual and training to the Feasibility Study and Construction Companies took time. Similarly, subsidy processing mechanism was finalized at the end of the FY. Nevertheless, in the end of FY, there are 33 plants under construction.	All processes now in place. Trainings completed and review systems in place. The subsidy processing will be done on next FY (2071/72)

Major deviations of key activities	Reasons for deviations	Adjustment plan
Delayed online subsidy administration system of PV system	Development/revision of ToR and management decision took a good amount of time, awaiting the concept design for the overall MIS system.	To be completed by fiscal year 2014/15
Could not complete the result framework review workshop	The program budget GAP analysis activity was not completed within the fiscal year.	Postponed to 2014/15

5 Integration of other RE interventions with NRREP

5.1 Clean cooking solution by 2017

- An ambitious mission: "Clean Cooking Solutions for All by 2017 (CCS4ALL)" has been incorporated in Government's Policy and Programme for Fiscal Year 2071-72 unveiled by the President's address to the parliament on June 29, 2014 and the GoN Budget Speech for FY 2071-72 presented by the Finance Minister. Private sector development and the quality stove dissemination becomes an integral part of the component after the formal announcement of an ambitious campaign- 'Clean Cooking Solution for All by 2017 and thereby producing IAP free Nepal' on Renewable Energy Week. For this reason some key activities are initiated. They are;
- Organized an international workshop on Clean Cook stoves market place from 10-12 July 2013 with the objective to create a platform of stove entrepreneurs for exchanging their respective experiences, business models as well as suitable stove designs in order to contribute to achieve CCS 2017.
- Organized a Stove design competition a joint call made by AEPC and International Centre for Integrated Mountain Development (ICIMOD) with the aim to provide the users with a menu of stoves that are suitable according the user's need and that can deliver the intended performance over the period of stove use and to promote innovations.
- Called for expression of interest (EoI) among private companies who could be manufacturers, importer, distributers and suppliers of household metallic cook stoves, institutional metallic cook stove and metallic rocket stove under government subsidy. Listing of new and efficient models will be done as per set standards developed by AEPC.
- Formed a National Alliance for Clean Cook stoves (NACC) as realized and agreed by AEPC and its stakeholders. Nepal Alliance for Clean Cook stoves (NACC; www.nepalcookstoves.org) was launched on 10th July 2013, while inaugurating the Clean Cook stoves Market Place 2013. The strategic intent of NACC is to initiate collaborative efforts in Nepal and create synergies for achieving the goal of CCS4ALL.

5.2 RE Source

- RE-Source developed a dynamic website and online database system www.re-source.org.np in the period to easily enable public accountability and act as a knowledge centre for capacity building activities in the RE sector.
- RE-Source's brochure was developed, designed and published in the period. The brochure contains information on RE-Source, its objective, outputs, activities and it working modality.
- RE-Source selected 17 organizations as a hub for RE-Source. The selected hubs include 9 Regional Service Centers (RSC), 2 National Service Centers (NSC) and 6 Associations.
- RE-Source focused its activities mainly on informing the market, creating adequate pool of demand and streamlining CDS demands. RE-Source carried out 32 Market Place events and organized an orientation programme. At present there are 110 CDS demand applications in pipeline. All these CDS demands are co-funding based.

- Seven orientations cum interaction workshops have been conducted to sensitize and strengthened the supply side in Kathmandu throughout the year. One PPA and PPR training have been conducted for the CDS suppliers.
- Total of 22 projects have been selected by the project selection committee and are at different stages of implementation out of 110 demands received. The statuses of the projects are attached herewith

5.3 Other initiatives:

ENDEV: Micro Hydro Debt Fund has been supporting MHPs up to 100kw through the loan financing in Nepal. So far, Clean Energy Development Bank has provided loan to 21 projects, amounting over Rs. 39 million. With this, 749 kilowatts have been generated and over 7,300 households have been electrified. Similarly, Himalayan Bank has provided loan to 9 projects, amounting over Rs. 24 million. With this 356 kilowatts have been generated and over 3200 households have been electrified.

UNCDF: UNCDF/CleanStart has been supporting four financial institutions viz. ACE Development Bank Ltd., Clean Energy Development Bank Ltd., Jeevan Bikas Samaj and Sana Kisan Bikas Bank Ltd. to carry out Rural Energy Technology financing. The four financial institutions were selected from among other financial institutions after a rigorous selection process.

The RETs that are eligible to be financed are biogas plants, solar home system and ICSs. ACE Development Bank will carry out RET financing through LFIs and therefore will provide wholesale lending to its LFIs. Clean Energy Development Bank will finance RETs through its subsidiary microfinance institution as well as other microfinance institutions. Jeevan Bikas Samaj will carry out RET financing directly to its clients. Similarly Sana Kisan Bikas Bank Ltd. will provide wholesale lending to its cooperatives that then will provide retail financing to its members. An agreement, regarding this, has already been signed. The financial institutions will have to install the targeted RETs effective from April 16 2014 to April 15 2017.

UNDP-GEF: GEF CEO has already endorsed the UNDP-GEF RERL Programme. The total budget of the programme is USD 5 M – USD 3 M from Global Environment Facility (GEF) as a part of its Climate Mitigation Portfolio and 2 M by UNDP from its core fund. The new UNDP-GEF RERL programme is an integral part of NRREP and will assist in Large Micro Hydro, Mini Hydro, Large Solar PV, Productive Energy Use and Support to CREF. UNDP-GEF requires separate reporting. The RERL has initiated preparatory works towards implementation of GEF project. Recently, Government of Nepal, Alternative Energy Promotion Centre (AEPC) and United Nations Development Programme (UNDP) signed a document to expand access to renewable in rural areas under the Government's National Rural Renewable Energy Programme Framework. RERL is in the process of preparing work plan for 2014, which is expected to be approved soon. UNDP has already initiated recruitment process to hire project personnel.

The projects expected results include support for formulation of innovative financial mechanisms to attract private investment in the renewable energy systems and productive energy uses. The

project will support NRREP to develop 10 MW from mini and micro hydropower plants, 2.5 MW of solar PV systems and establishment of mini grids connecting Micro-Hydro Plants (MHPs) of 300 kilowatts (kW) capacity to pool energy. The project will also support to build up capacity of local fabricators, installers & system integrators.

UNESCAP: In Nepal, with the support from UNESCAP, the concept of Pro Poor Public Private Partnership will be piloted in two sites. The major objective of this approach will be to pilot the private sector investment in RE projects. It will coordinate with NRREP activities for piloting new ideas and approaches towards RE promotion. The following is the progress of the 5P project.

- Agreement has been reached to start project construction in two sites – 1) Solar mini-grid system of size around 8kW-17kW Baidi VDC of Tanahun district and Biomass gasifier plant of size 12kW in Raksirang VDC of Makawanpur district. The construction of projects is anticipated to be started by October 2014.
- Based on the recent changes in the timeline and activities, LoA signed between AEPC and UNESCAP, is being revised.
- Private company partner for biomass gasifier project in Raksirang, AnantaGasifier Private limited, has conducted detailed project feasibility study and the draft report of this study has been submitted to AEPC. Similarly, Federation of Community Forestry Users, Nepal (FECOFUN) has been carrying out detailed environmental impact study.
- An NGO, Rural Empowerment Society Damauli Tanahun Nepal (RESDTN), contracted to provide social mobilization services in both project sites. The community mobilization has helped to garner support from the other government stakeholders such as DDC and VDC in order to implement these projects.
- SaralUrja, Nepal has been selected as the private company to initiate Incubation Phase at the Baidi VDC in order to establish SPV and carry out the all the preliminary activities before the project goes into construction phase.

SREP: The World Bank under Scaling up Renewable Energy Program (SREP) is supporting Alternative Energy Promotion Centre (AEPC) to develop market for large scale Commercial Biogas and Municipal Solid Waste (MSW) to energy projects in Nepal. SREP is expected to contribute on achieving NRREP targets of large biogas plants especially commercial biogas plants and waste to energy projects (MSW biogas plants). SREP funding will be provided to reimburse AEPC's contribution after the plant (commercial and MSW plants) is constructed and operational, and is producing energy as certified by an Independent Verifier. The total grant amount of SREP under Extended Biogas Program is 7.9 million dollar.

SASEC: Recent agreement made between GoN and ADB on "South Asia Sub-regional Economic Cooperation Power System Expansion Project SASEC: PSEP (RRP NEP 44219)" has a two prone approach: National Grid Expansion (Implementing Agency is NEA) and off grid RE based Electrification Mini grid (Community Electrification Projects (Implementing Agency is AEPC). This five year project's impact will be increased electricity access both in Nepal and across the border. The outcome will be increased capacity of national electricity grid and increased renewable energy use.

6 Review of Problems, Challenges and Lesson Learned

6.1 Main implementation related problems experienced in the reporting year and solutions made:

Operational Challenges faced	Solution made
1. Improper GESI disaggregated database and reporting system	Coaching, follow up, technical back up, constantly working for upgrading information from MQA and GESI units
2. Hesitance to accept innovative approaches to ensure RETS services to the targeted people through Right Holder's Organizations (RHO).	Dialogue with management team to support indigenous nationalities and female Dalits in increasing their access to RET services. GESI Unit to design a contracting modality within the framework of PPA or Grant guideline
3. Unavailability of RST tested Panel/Battery Manufacture serial number from RETS.	Amendment of NEPQA resulted for smooth testing procedure and releasing serial numbers of battery/panel to AEPC from RETS.
4. Policy provision of 120 days deadline of the SAFs submission could not be properly implemented.	SESC management provisioned to register the incomplete SAF whose serial number has not been communicated from RETS but in the process of testing.
5. Panel/Battery Serial number for C20 SAFs was not resolved till the end January 2014. This delayed the processing by two months.	Management decided to check the serial number and enter the RETS approved serial number.
6. Low promotion of solar cooker and dryer as per new subsidy delivery mechanism which is only targeted to rural areas.	Revision of subsidy policy and delivery mechanism is proposed. Made a rigorous orientation programs with qualified solar thermal companies on new modalities, standards etc. Made rigorous discussion with RETS along with qualified companies to make the testing environment qualitative and friendly with market and users. Hope with the intensive exercise of this year will bring a very good success in the coming fiscal year.
7. Difficulties to carryout IGA outside the MHP catchment areas	Approved IGA guideline as well as developed strategy for IGA outside CE catchment areas
8. Long transition from DEEU/S to DEECCS; not fully internalized by some DDCs and EEOs.	Regular interaction with DDCs for internalization of DEECCSs.
9. Poor access to biogas appliances in the remote villages.	NBPA has been asked and ready to establish points to get such appliances.
10. Changes made in Biogas Target and Budget to address high demands.	Target is revised according to the allocated budget figure.
11. Lack of Data Entry System in Biogas subcomponent	Database system is developed and the data entry is going on with required bugging and debugging.

6.2 Emerging operational challenges

Emerging Operational Challenges	Possible Solutions
1. Integration of all monitoring activities	Development of integrated monitoring guidelines.
2. Selection of Banks to operate subsidy and credit activity under CREF	Selection of banks needs to be done using internationally followed best practice on selection of banks to have stability, transparency and to avoid controversy (from CREF).
3. Difficult to settle sick / uncompleted projects, National grid reached project	Provision of Additional financial support, T & C of project as per actual power output and HHs connected and disbursement of subsidy accordingly. Further, strengthen coordination with NEA
4. Delay in receiving pico hydro project proposal from DDC	Deadline for submission of pico hydro project proposals extended till end of FY 2013/14
5. Large Biogas sector still heavily depends on AEPC.	There is a requirement for partnership with international technology providers and capacity building of the local sector to promote other new efficient technologies. Some of this will be done under the SREP TA budget.
6. Could not support Right Holder Organizations for RET orientation at VDC level under PPA/PPR though we signed MOU.	Reflect in the NRREP procurement guideline
7. Turnover of RSC staffs	Authorized RSCs for the placement of the staff.
8. Difficult to register forest and timber based MSMEs	Proper coordination with Department of Forest and Department of small and cottage Industry
9. Reporting of non subsidy schemed upgrading MSMEs	Develop reporting mechanism
10. Availability SHS/SSHS SAFs at local level	If, SAFs are uploaded in AEPC website companies can print themselves from anywhere and system specified in those SAFs can be tracked by NAV software at AEPC.
11. Provision of 120 days deadline of the SAFs creating time pressure to solar companies.	No deadline of the SAFs should be there as companies are not being able to submit those within 120 days.
12. Large volume of SAF to be processed in Solar	Online subsidy application system and which is already in the process of contracting to the service provider.
13. The project life after the warranty period of two years is the challenges of PVPS system	The maintenance support should be given and the maintenance support should be 50% of the maintenance cost.
14. The creation of demand of solar cookers is very much challenging	MoU with poverty alleviation fund, National Trust for Nature Conservation, International Organization for Migration may help to create demand
15. Used Lead Acid Battery management	Adequete Battery collection cum recycling systems

should be established

6.3 Lesson Learned in this year:

- There is huge gap between the NRREP targets set in the program document and GoN targets especially in RE technologies. This situation should be reviewed before start of the annual planning process
- AEPC increased subsidy rates of RE technologies without managing necessary resources. In future, subsidy rates should be revised based on available or potential resources only.
- Recommendations of compliance audit report should be implemented in systematic ways by incorporating necessary actions into the annual plans so that there will be enough budgets and responsible unit/person to address them.
- The AEPC/NRREP decided to adopt PPA/PPR guidelines fully for its procurement purposes without necessary preparations. As its implication, procurement process is still becoming a complex job. Therefore, the AEPC/NRREP should pay du attention to address this situation immediately.
- There seems huge financial gap to deliver program targets. Therefore, necessary resources should be managed on time to avoid future financial risks.
- Use of modern electronic tools such as capturing field data through mobile application is successfully piloted that has potential to replicate for monitoring.
- Key dates of planning process (which are mandatory) and Streeing committee (plan approving authority) meeting dates are not matching properly. This situation has affected particularly the AWP approval process from past. Therefore, streering committee meeting should be organized accordingly addressing this managerial issue.

6.4 Status of NRREP risks perceived in Program Document

Following matrix is a comparison of risks perceived in the program document and the situation of risk after one year. Major risks are still pertinent.

Risks areas perceived in PD	Mitigating measures	Current status
1. **Slow implementation of reforms to make AEPC autonomous**	• Expedite the process to approve the bill from parliament • Only start capacity building of AEPC when autonomous status is achieved.	• Still a risk. The autonomous status of AEPC depends on the passing of the "Bill for establishment and operation of renewable energy board" by the cabinet. Cabinet has approved the bill but Ministry is yet to submit in the parliament.
2. **Mandate to cover small hydropower up to 10 MW will direct attention away from**	• Stringently follow-up on the NRREP targets for community electrification	• Conducted the study on the current status of the small hydro power projects up to 10 MW to explore the possible interventions of AEPC • Conducted the national level workshop

Risks areas perceived in PD	Mitigating measures	Current status
community electrification.		on mini hydro development challenges and prospectus • Drafted mini hydro white paper • There is a firm understanding of focusing on projects below 1 MW for the time being, and the CE Sub-component is very cautious on trying to reach the NRREP target in this area. • SOD is updated and forwarded to ministry for the approval.
3. Overlapping programs/projects in renewable energy sector	• AEPC will timely raise the issue and settle as appropriate • Signing Code of Conduct between GoN, JFA partners and non-JFA partners	• Still a risk. Even though the concept of NRREP as a single programme modality is being recognized, there is still the risk that development partners and GoN can be tempted to design and implement RE programmes to carter their own objectives irrespective of NRREP
4. The GoN commitments to revise the subsidy system and to provide a larger portion of the subsidies for RETs	• AEPC will remind GoN to fulfill the commitments on time. • Continued negotiations on the matter between GoN and DP's	• GON revised subsidy policy and AEPC revised subsidy delivery mechanism • GoN's disbursement to subsidy in first and second project year has been lower than projected in Programme Document • Review process of the subsidy system has been started
5. Slow establishment of CREF	• AEPC will continuously follow-up to expedite the process	• CREF Financial Intermediation Mechanism has been approved • Secretariat established and Bank selection process has started.
6. Subsidy to RETs potentially distorting the market and encouraging market inefficiencies, including increasing RET prices and provide less incentive for suppliers.	• Implementation of more competition among suppliers • Revised subsidy delivery mechanism to change incentives	• Still a risk. • With the current blanket approach in the subsidy, e.g. in solar home systems, indications of market inefficiencies like price increase have been observed. • In Community Electrification SC the compulsory information sharing with supplier's association has been removed to avoid cartelling and increase competition • Review of the subsidy mechanism to address market inefficiencies and make it more targeted in upcoming revised

Risks areas perceived in PD	Mitigating measures	Current status
		subsidy policy.
7. Fiduciary risks for Public Financial Management in MoEnv, MoFALD and AEPC, and risk of corruption.	• Ring-fencing • Financial and procurement oversight • Value for money audits	• Still a risk • With the establishment of a Compliance Unit in NRREP, the awareness on these issues is higher both within AEPC and with its partners and stakeholders • Increased numbers and targeted audits being implemented by compliance unit • Procurement unit has been established and AEPC/NRREP decided to follow government PPA/PPR system.
8. While Nepal will be a federal state the implications for the institutional set-up within the country will remain unclear for some time.	• Adjust NRREP to a changed national institutional set-up	• Still a risk as the future state structure is still not clear. • AEPC has started feasibility study to establish RE hubs at regional levels. • No measures being implemented

7 Annexes

7.1 Performance against outputs:

NRREP Outputs		Cumulative Achievements till 2013/14
Output 1.1	The CREF established and operational as the core financial institution for the effective delivery of subsidies and credit support to the renewable sector	• CREF has been established as a Financial Management Mechanism.
Output 1.2	Efficient and effective delivery of credit to RET sector through Banks and MFIs	• Handling and partner banks are in selection process • So far, 35 MHP have received loan and more 1,230 kilowatts of power has been generated through credit financing.
Output 1.3:	Efficient and effective delivery of subsidies to RET sector in close consultation with AEPC	• The mobilization of subsidy funds within 2nd year of implementation is NPR. 3,587,979, 000 which is 84% of total allocated budget for 2 years in subsidy.
Output 2.1	Scaled up implementation network is in place for biogas – Sector commercialization and GESI and Regional concerns	• Initiated the implementation of the Plant Rehabilitation and Efficiency Improvement Project (PREIP) for plant rehabilitation. • 36,496 domestic biogas plants installed so far serving more than 33% belonging to deprived households. • More than 100 companies are pre qualified and most of the companies are focusing on Mid- and Far-western regions for biogas plant installation.
Output 2.2	Domestic, community and institutional (large) biogas plants are deployed/established and new biogas (waste digestion, motive power, electricity production) technology is ready for piloting.	• Completed preparatory works such as guideline preparation, pre qualification of companies, training, area selection, studies etc to implement Domestic, community and institutional (large) biogas plants.
Output 2.3	Scaled-up implementation of ICS	• Nepal government declared clean cooking solution for all by 2017 campaign and an Alliance formed at national level to implement the declaration. • 264,156 mud and 8,866 metallic ICS established so far out of which 53% are female and 82% disadvantaged HHs. • 28 VDCs and two IICS clusters were declared IAP free • Revision in Service Delivery Mechanism with lead role of DDCs in 49 districts
Output 2.4	New & improved biomass energy technologies such as enterprise scale stoves, gasifiers and bio-briquetting are ready & field tested	• Completed preparatory works such as guideline preparation, training, area selection, feasibility studies etc to implement new technologies at enterprise scale.
Output 2.5	2.5.1 Update knowledge of evolving rules and regulation in different carbon markets	• IOE/TU was supported to develop M.Sc. Curriculum on Climate Change and 3 students were awarded with the research grant on topic linking Climate Change with RET.

NRREP Outputs		Cumulative Achievements till 2013/14
		• Gained knowledge on Role of renewable energy technologies in Climate Change Mitigation and Adaptation through study.
	2.5.2 Develop a well diversified portfolio of projects using different instruments	• Supported 25 districts to prepare DCEP • 59,856 no of Biogas plants are included in CPAs.
	2.5.3 Put in place quality and performance assurance system and monitor continuously	• Carried out Emission Reduction, Improved Cooking Stoves (ICS) Improved Water Mills (IWM) users' surveys. • Final report on community benefit monitoring survey has been received and accepted. • Installation of energy meters in 176 MHPs bundled as CDM project has been completed.
	2.5.4 Support external monitoring and verification in effective manner	• Biogas PoA has been registered by CDM EB with PoA and 3 CPAs (CPA-2, CPA-3 and CPA-4) are included in the Biogas PoA. • Completed the field verification for 4 Biogas CDM Projects, MHP CDM Project and inclusion of CPA-5 in biogas PoA. • Revenues amounting 1.99 million USD received as a part of carbon trading attributable to biogas Project.
Output 2.6	A highly developed fraud-proof registration, eligibility-checking and verification system for solar energy systems (SHS, SSHS, ISPS and PVPS)	• 186, 362 solar (SHS and SSHS) and 197 ISPS and PVPs installed so far serving more than 200,000 HHs belonging to 47% disadvantage HH with 49% female population. • Development of online SAF registration system is under process. • Established Panel/Battery Manufacture SN tracking mechanism. • Developed and updated technical standards for solar energy technology.
Output 2.7	Used Battery management introduced and functional, and in compliance with international standard	• Government has revised environmental regulation incorporating battery management issues. • A study done on used battery collection system to establish used battery collection centers in Nepal.
Output 2.8	Some Viable "large Community PV Systems' are operational	• Supported to 197 rural solar drinking water pumping projects serving children of 147 schools and 50 communities.
Output 2.9	Solar thermal domestic devices (dryers, others) are ready for the market	• Completed preparatory works such as guideline revision, training, feasibility studies etc to implement solar thermal domestic devices. • Successfully piloted an industrial scale solar drier system capacity to dry up 250 kg Lapsi at a time. • Installed 212 solar dryers and cookers so far serving 212 HHs.
Output 2.10	Project management capacity is in place and performing, and number of completed projects increases at a faster rate.	• Altogether 355 Micro/Pico Hydropower Projects have been completed so far generating 6200.6 kW power. These projects served 62,983 HHs with 51 % female population. • 61 MHP Survey consulting firms and 78 MHP Installer companies pre-qualified
Output 2.11	Community electrification projects better designed with regard to available potential, and operate at a higher load	• Updated technical standard/guidelines of M/MHP/PHP • Prepared MH procurement guidelines and standard • Capacitated communities through different training aiming to increase project efficiency.

NRREP Outputs		Cumulative Achievements till 2013/14
		• Completed larger size micro hydro (No. of projects : 13 of 1140 kW with capacity range of 80-100 kW out of 4013 kW commissioned.
Output 2.12	Community electrification technology is scaled-up and is of a higher standard	• Supported Kathmandu University Turbine Testing Lab (KUTTL) for developing turbine testing facilities and Francis turbine lab • Supported for installation of real time data transmission technology. • Prepared guidelines for Co-operative Model of Mini/Micro Hydro Projects
Output 2.13	Improved Water Mills promotion is scaled-up and the technology is of a higher standard	• Installed 1,618 Improved water mills so far serving around 109,692 HHs. • Updated Technical standard/Implementation guidelines.
Output 2.14.1-2.14.3	AEPC is recognized as an effective, efficient institution for the promotion and development of the RE sector	• Developed the subsidy policy and delivery mechanism for renewable energy. • Complete the preparation of 13th Three year Renewable Energy Sector Plan • Developed NRREP admin and finance guideline got approval and implemented. • Organized individual capacity building activities for AEPC/NRREP Staff • Organized RE international exposure visit to Germany for high level government officials from MOEST, NPC, OPMCM, MOF, and MOFALD. • Completed the preparation of AEPC's SOD plan. • Completed the Performance Gap Assessment of AEPC Staff to identify capacity development interventions.
Output 2.14.4	Develop and Implement AEPC Monitoring and Quality Assurance systems for effective result -based management	• Developed and implemented GESI responsive result-based M&E framework • Good progress achieved so far toward development of functional NRREP MIS with beneficiaries' categorization. • Established and implemented Random Monitoring Mechanism. • Established baseline -2012 with sex and caste segregated data of each technology at all level. • Started developing functional feedback and quality assurance system • Produced periodic progress reports (quarterly/annual).
Output 2.14.5	AEPC is recognized as GESI responsive institution in promotion of RETs to create employment and generate income through MSME approach to improve living standard of rural women and men	• Addendum of GESI concerns incorporated into in RE subsidy policy and delivery mechanism and planning reporting framework • Prepared and disseminated GESI tool box for AEPC/NRREP, DEECCS, private sector • Developed and implemented social mobilization guideline. • Developed and implemented GESI audit guideline and procedure. • Disseminated GESI responsive RET promotional information through media, posters etc.

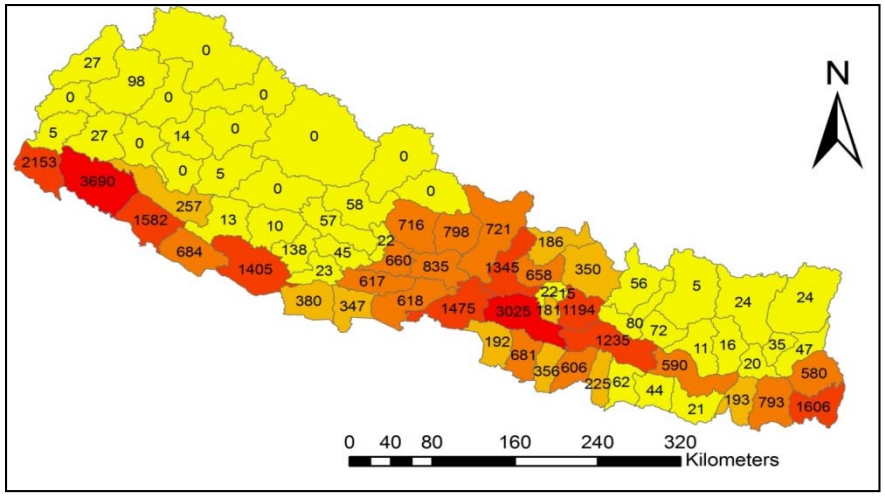
NRREP Outputs		Cumulative Achievements till 2013/14
		• Increased outreach of RET services through collaborating with right-holder institutions of women and DAG associated networks • Two days RET service delivery system to the right holder's organization aiming to make them agent for promotion. • Conducted 11 RET sensitization events to 772 indigenous nationalities in coordination with right holders' organization
Output 2.15	DEEU/Ss become an integral part of DDCs and work to establish linkages between the AEPC and the needs of the rural population whilst promoting the interests of women and marginalized groups	• Internalized DEECCS as an integral part of DDCs' structure referring to EFLG mechanism. • Strengthen the functional Linkage between DDC (Public Body) and RSCs (NGOs working on RETs) for better coordinated RET promotion. • Ensured DDCs RE activities to reflect NRREP annual plan and vice versa. • Resource investment trend in RE sector of DDCS is in increasing trends.
Output 2.16	RSCs are contracted and their capacity enhanced to facilitate the delivery of RE services and promote linkages at a local level as a resource of the AEPC	• 9 RSCs and 2 National Technical Service Providers are in full operation. • Operational Guideline of RSCs approved and is in operation. • Supported RSCs to increase their capacity in project planning, monitoring and reporting. • Supported all RSCs to minimize fiduciary risk through the placement of better financial system.
Output 3.1	Capacities of existing MSMEs are enhanced	• Business Promotion Units (BPUs) have been established in each 9 RSC • A total of 171 Local Economic development Committee (LEDC) are formed in the respective potential MHP catchment areas. • Similarly District project Review Committees (DPRC) are formed in 22 districts and Business Proposal review Committee (BPRC) at center level. • Prepared PEU implementation guideline • 97 Upgrading plans are approved by CREF. • 3 pilot upgrading SMEs are approved and supported
Output 3.2	New and innovative MSMEs are created and operationalised, with a specific emphasis on integrating women and marginalized section of the population	• 203 business plan of new MSMEs are approved from CREF • 3 Business plan of pilot new SMEs are approved and supported
Output 3.3	Appropriate business development services are available to MSMEs in RE catchments	• Study on "Exploring Local and District Level Organizations/Firms Providing BDS required for MSMEs" completed • 392 BDS linkage established between entrepreneurs and BDS service provider
Output 2.17	Income generating activities (IGA) for households using RE are developed and implemented in catchments areas	• IGA guideline approved • 1013 no of IGA plans are prepared, appraised and approved followed by support for establishment.

7.2 District-wise RE Technologies Installations in FY 2070/71 (in numbers):

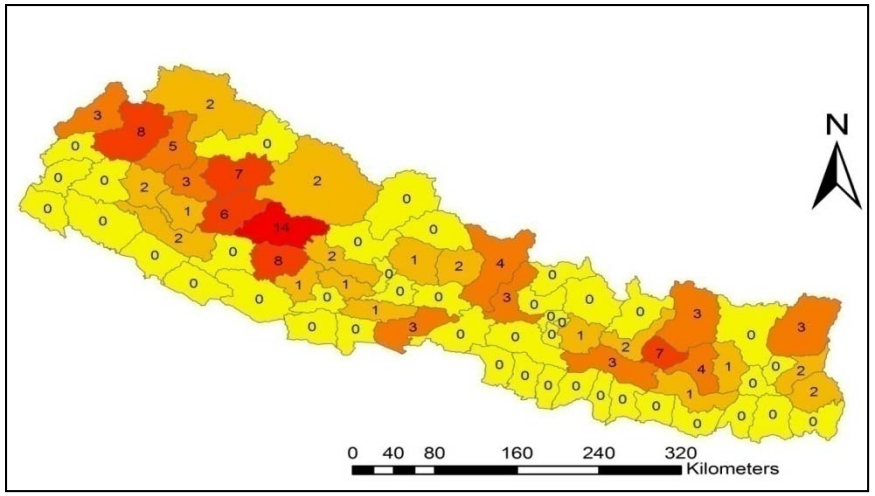
	Technology-	Solar					Community Electrification			Biogas		Biomass		PEU/MSMEs		
S.N.	District	SHS	SSHS	ISP	PVPS	Dryer	MHP	Pico	IWM	Domestic	Institution	ICS	MICS	New	Upgrade	IGA
1	Achham	3478	43	0	0	0	2	0	10	0	0	0	0	10	1	42
2	Arghakhanchi	634	371	1	0	0	0	0	0	23	0	808	0	0	0	0
3	Baglung	26	1	0	1	0	2	1	0	57	0	670	41	7	4	35
4	Baitadi	2566	1133	3	1	0	0	0	35	0	0	0	0	1	1	26
5	Bajhang	2621	429	2	0	1	8	1	20	98	0	0	0	18	0	26
6	Bajura	1088	198	1	0	4	5	3	29	0	0	0	43	16	0	46
7	Banke	1360	0	0	0	1	0	0	0	684	0	326	0	0	0	0
8	Bara	81	0	0	0	0	0	0	0	681	0	2029	0	0	0	0
9	Bardiya	339	106	0	0	0	0	0	0	1582	0	0	0	0	0	0
10	Bhaktapur	0	0	0	0	6	0	0	0	15	0	0	103	0	0	0
11	Bhojpur	1788	59	0	0	0	1	3	0	16	0	2676	80	0	0	0
12	Chitwan	1142	127	3	0	1	0	2	0	1475	0	138	0	0	0	0
13	Dadeldhura	136	48	0	0	0	0	0	10	5	0	0	0	0	0	0
14	Dailekh	4976	40	4	1	0	1	0	0	0	0	0	0	0	0	16
15	Dang	1329	0	0	0	0	0	0	0	1405	0	775	0	0	0	0
16	Darchula	1375	114	2	0	0	3	0	70	27	0	0	147	0	0	0
17	Dhading	797	286	1	1	0	3	3	14	1345	0	2261	0	1	0	60
18	Dhankuta	40	0	0	0	1	0	0	3	20	0	4672	19	2	0	24
19	Dhanusa	27	0	0	0	0	0	0	0	62	0	4872	0	0	0	0
20	Dolakha	44	91	2	2	1	0	2	14	56	0	229	362	5	5	39
21	Dolpa	274	0	0	0	1	2	0	0	0	0	0	0	0	0	0
22	Doti	2090	146	0	1	0	0	0	31	27	0	0	0	2	0	10
23	Gorham	127	281	0	0	0	4	3	0	721	0	1034	330	5	5	24
24	Glum	1284	621	1	0	0	1	6	0	45	0	2473	0	1	1	0
25	Hula	77	339	0	0	23	2	0	0	0	0	0	59	0	0	0
26	Ilam	348	105	0	1	0	2	5	11	580	0	3823	202	5	5	0

	Technology-	Solar					Community Electrification			Biogas		Biomass		PEU/MSMEs		
S.N.	District	SHS	SSHS	ISP	PVPS	Dryer	MHP	Pico	IWM	Domestic	Institution	ICS	MICS	New	Upgrade	IGA
27	Jajarkot	2798	90	6	0	0	6	3	39	5	0	1368	122	4	7	39
28	Jape	120	0	0	0	0	0	0	0	1606	0	4531	0	0	0	0
29	Jumna	1019	350	2	0	10	7	0	0	0	0	0	175	4	1	28
30	Kigali	3611	74	3	0	0	0	0	50	3690	0	5304	0	0	0	0
31	Kalikow	1592	1015	2	0	0	3	0	66	14	0	0	141	0	0	0
32	Kanchanpur	144	40	0	0	0	0	0	0	2153	0	2247	0	0	0	0
33	Kapilbastu	13	40	0	0	0	0	0	0	380	0	6615	0	0	0	0
34	Kaski	18	167	0	0	0	1	1	55	716	0	74	61	10	1	5
35	Kathmandu	0	0	0	0	108	0	0	0	22	0	447	5	0	0	0
36	Kavrepalanchowk	187	0	3	0	4	1	4	13	1194	0	1011	50	7	14	63
37	Khotang	2640	191	2	0	0	4	13	10	11	0	583	123	11	2	42
38	Lalitpur	238	0	0	0	24	0	2	0	181	0	9	0	0	0	0
39	Lamjung	137	256	6	0	0	2	1	12	798	0	600	155	7	0	9
40	Mahottari	31	146	0	0	0	0	0	0	225	0	11290	0	0	0	0
41	Makawanpur	894	4	2	1	0	0	13	25	3025	0	125	90	0	0	0
42	Manang	0	0	0	0	0	0	0	5	0	0	0	64	0	0	0
43	Morang	419	250	1	0	2	0	0	0	793	0	2685	0	0	0	0
44	Mugu	294	447	2	0	0	0	0	0	0	0	0	742	0	0	0
45	Mustang	66	0	0	0	0	0	0	0	0	0	0	2	0	0	0
46	Myagdi	159	0	0	0	0	0	7	0	58	0	247	140	1	12	12
47	Nawalparasi	881	87	0	0	0	3	9	0	618	0	261	0	8	0	11
48	Nuwakot	52	17	0	0	0	0	4	20	658	0	702	139	0	0	0
49	Okhaldhunga	2001	1	4	3	0	7	2	40	72	0	327	28	5	13	33
50	Palpa	1237	86	3	1	0	1	2	0	617	0	523	0	3	0	0
51	Panchthar	809	17	4	0	0	2	18	1	47	0	345	120	12	3	67
52	Parbat	49	359	0	0	0	0	0	0	22	0	10	207	0	0	0
53	Parsa	157	0	0	0	1	0	0	0	192	0	2282	0	0	0	0
54	Pyuthan	1365	844	0	0	0	1	0	0	138	0	0	0	0	0	0
55	Ramechhap	684	0	2	1	0	2	9	0	80	0	314	17	0	0	0

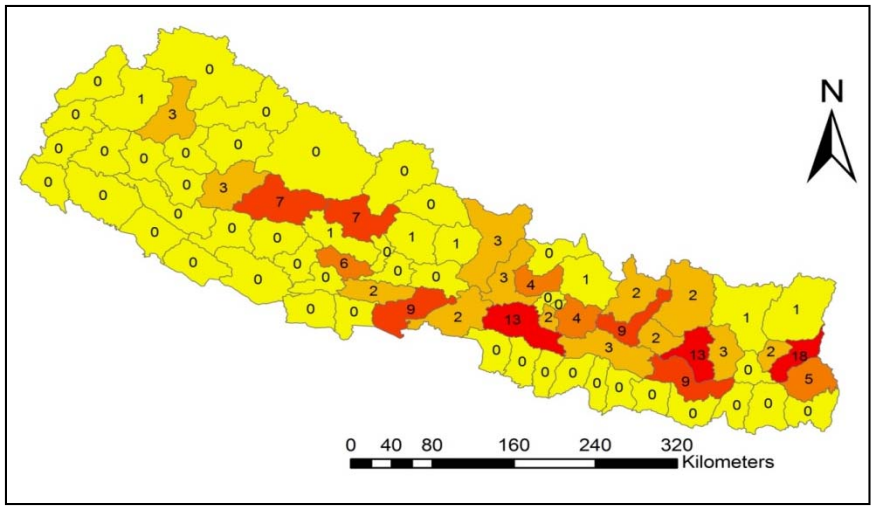
	Technology-	Solar					Community Electrification			Biogas		Biomass		PEU/MSMEs		
S.N.	District	SHS	SSHS	ISP	PVPS	Dryer	MHP	Pico	IWM	Domestic	Institution	ICS	MICS	New	Upgrade	IGA
56	Rasuwa	29	0	0	0	0	0	0	15	186	0	158	129	0	0	0
57	Rautahat	823	6	0	0	0	0	0	0	356	0	26272	0	0	0	0
58	Rolpa	4391	25	7	1	0	8	0	0	10	0	489	48	11	0	54
59	Rukum	3673	183	15	2	0	14	7	36	0	0	414	55	5	0	46
60	Rupandehi	0	0	0	0	1	0	0	0	347	0	5411	0	0	0	0
61	Salyan	5522	43	1	0	0	0	0	34	13	0	285	0	0	0	0
62	Sankhuwasabha	470	10	1	0	1	0	1	5	24	0	4520	211	0	0	0
63	Saptari	55	98	0	0	0	0	0	0	21	0	2353	0	0	0	0
64	Sarlahi	1637	393	0	0	0	0	0	0	606	0	13340	1	0	0	0
65	Sindhuli	2681	0	6	0	0	3	3	25	1235	0	0	0	1	0	50
66	Sindhupalchowk	58	0	3	0	3	0	1	38	350	0	256	509	0	0	0
67	Siraha	237	0	0	0	0	0	0	0	44	0	3813	0	0	0	0
68	Solukhumbu	347	0	0	0	0	3	2	30	5	0	441	193	3	5	15
69	Sunsari	198	0	0	0	0	0	0	0	193	0	3350	0	0	0	0
70	Surkhet	4232	311	5	2	1	2	0	15	257	0	322	0	14	3	26
71	Syangja	73	53	0	1	10	0	0	0	660	0	328	0	4	0	48
72	Tanahu	320	1421	1	1	1	0	0	0	835	0	1031	0	0	0	
73	Taplejung	458	34	1	0	0	3	1	0	24	0	514	126	11	3	44
74	Terhathum	212	0	3	0	4	0	2	0	35	0	3772	21	5	5	15
75	Udayapur	4920	0	1	4	3	1	9	0	590	0	56	0	4	5	58
	Total	**79998**	**11596**	**106**	**25**	**212**	**110**	**143**	**781**	**32030**	**0**	**135811**	**5060**	**203**	**97**	**1,013**



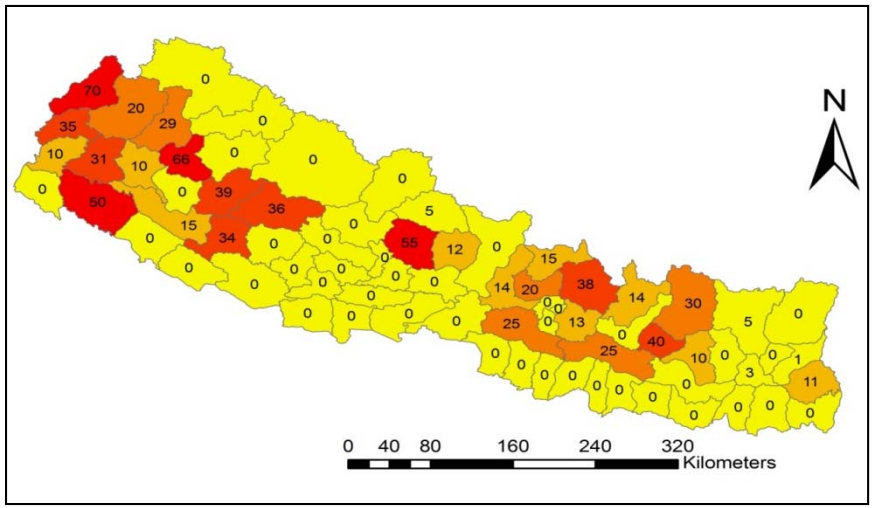
Geographic Coverage of Domestic Biogas Systems



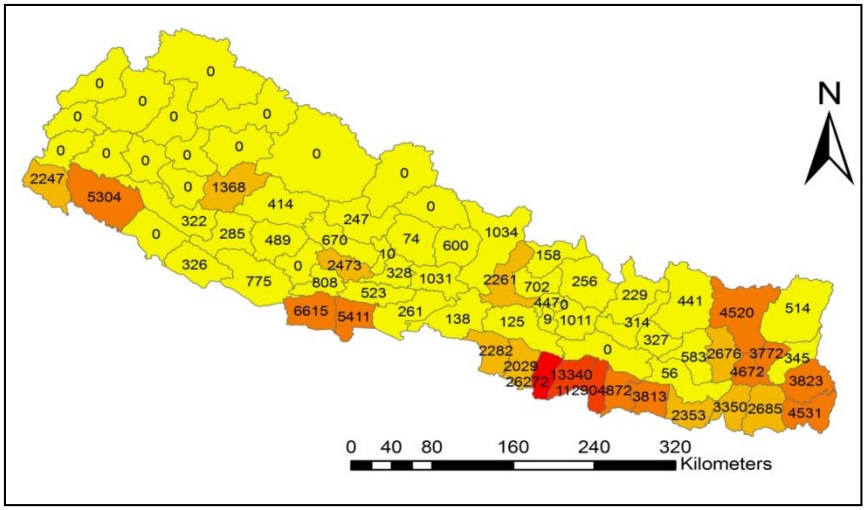
Geographic Coverage of Micro Hydro Power System



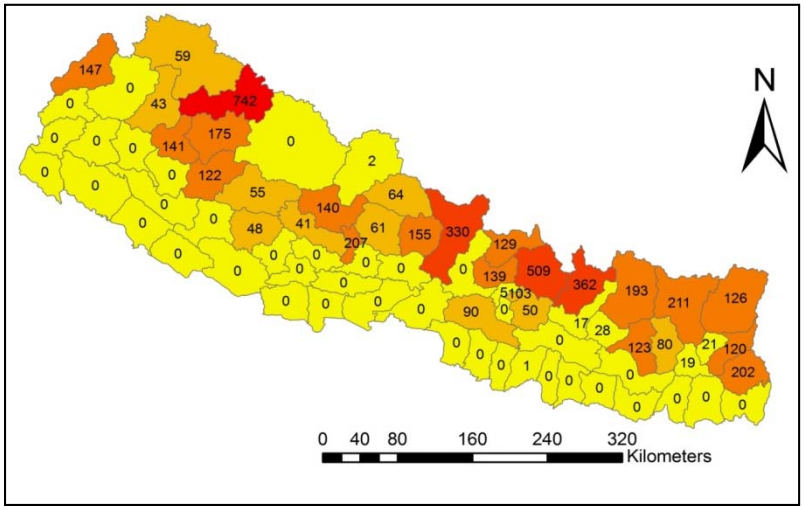
Geographic Coverage of Pico Hydro Power Systems



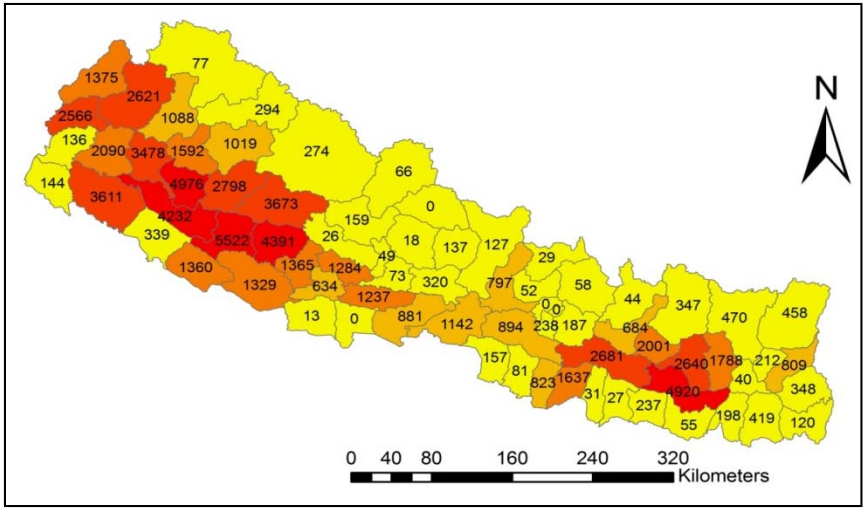
Geographic Coverage of IWM Systems



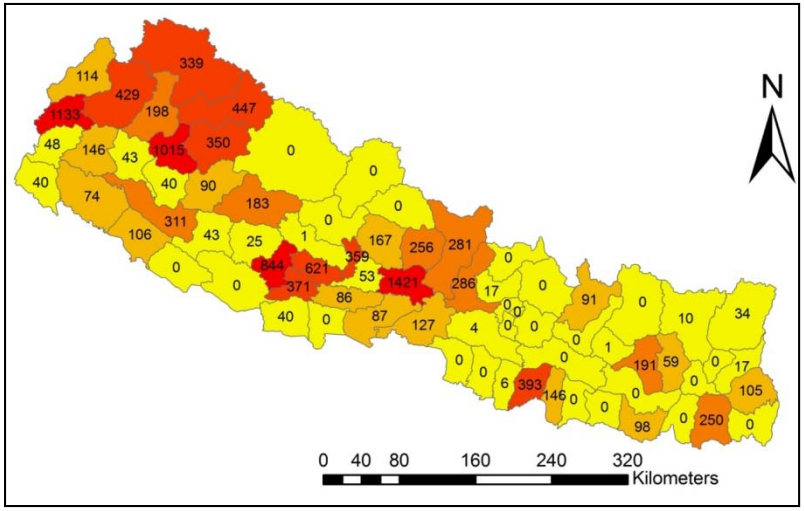
Geographic Coverage of ICS Systems



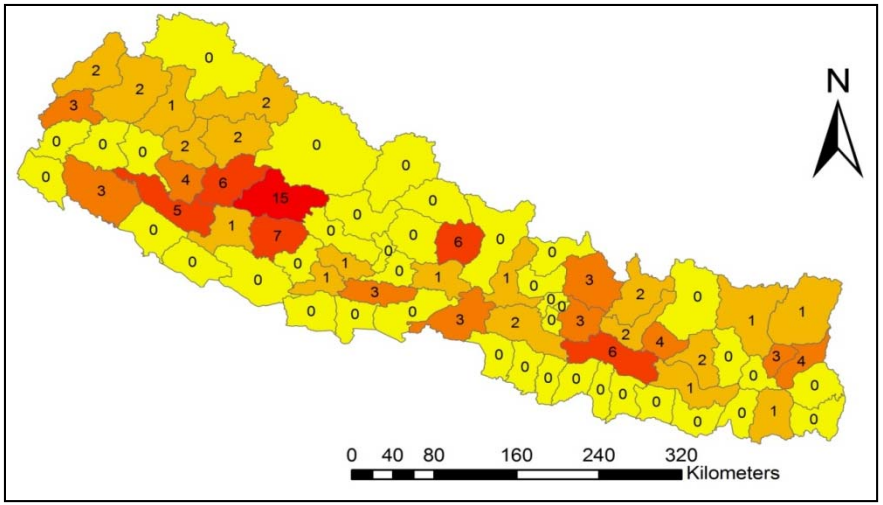
Geographic Coverage of MICS Systems



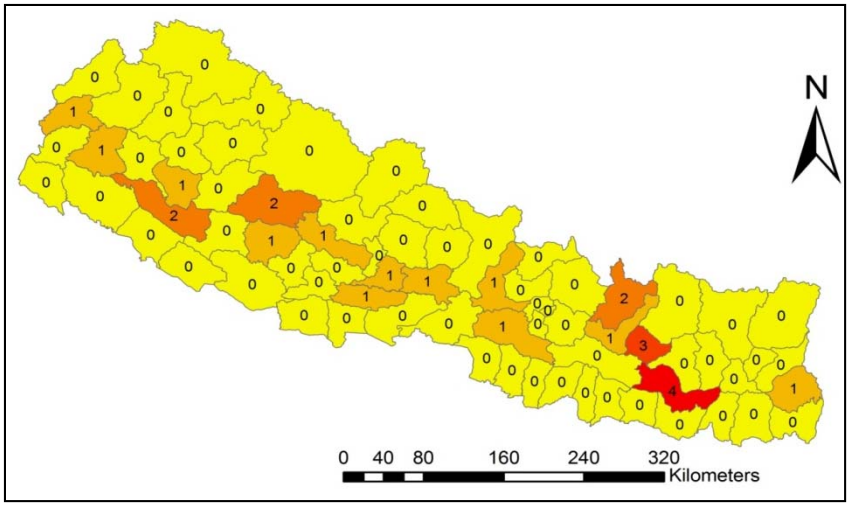
Geographic Coverage of Solar Home Systems



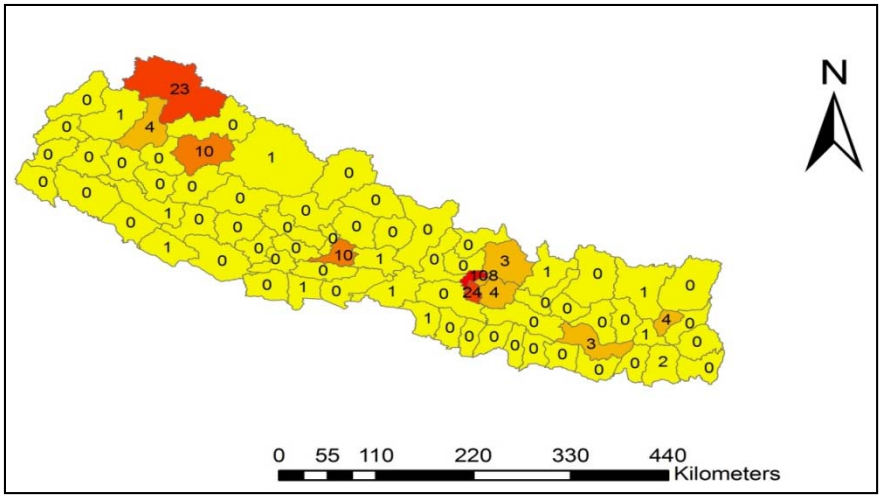
Geographic Coverage of Small Solar Home Systems



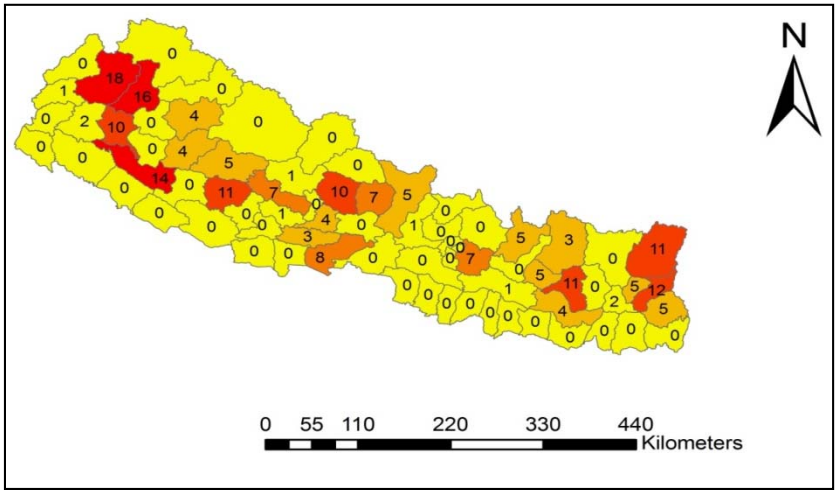
Geographic Coverage of ISPS



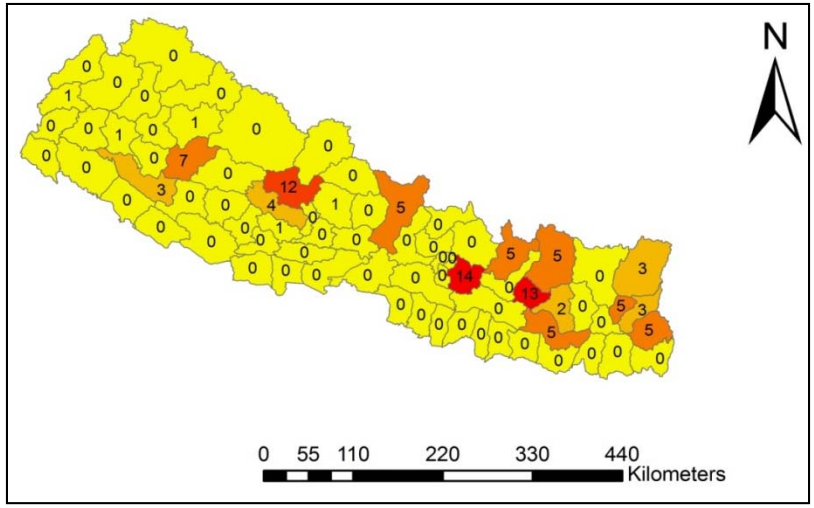
Geographic Coverage of PVPS



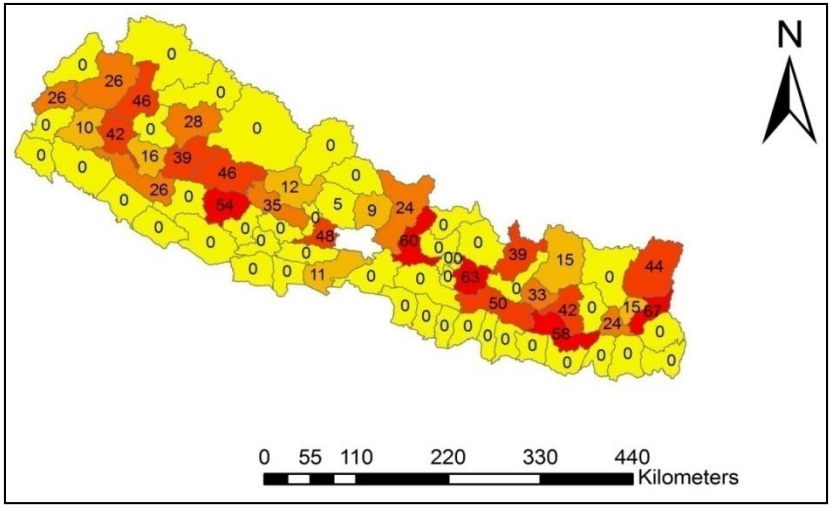
Geographic Coverage of Solar Dryers



Geographic Coverage of New MSMEs



Geographic Coverage of Upgraded MSMEs



Geographic Coverage of IGA

A. Details of Installed Micro Hydro Projects

SN	Project	District	VDC	kW	HH
1	Rancha Khola Ganeshthan MHP	Sindhuli	Santeshwori-7	10	94
2	Lumjhu Khola MHP	Khotang	Jalapa-6	19	186
3	Nakham Khola MHP	Khotang	Patheka-4	60	565
4	Donchhenpo Khola MHP	Sindhuli	Santiswori -6	15	145
5	Nokati Tap Khola MHP	Khotang	Phedi-2	40	340
6	Gokule Gad MHP	Darchula	Boharigaun-1	47	490
7	Thali Gad Khola MHP	Darchula	Dhapa-8	30	488
8	Lalbang Sipcha Khola MHP	Rukum	Sakh-7	7	114
9	Darna Micro Hydro Project MHP	Achham	Darna	83	915
10	Pelpque Khola MHP	Gorham	Saurpani	7	121
11	Ling Khola MHP	Gorham	Aruabang	8	155
12	Kunpa Sangura Khola MHP	Rolpa	Irribang	60	572
13	Morlung Khola MHP	Kaski	Ghandruk-8	25	41
14	Nishi Khola III MHP	Baglung	Nishi-4	100	765
15	Tamghas Khola MHP	Rolpa	Mirul-7	7	70
16	Tikhachuli Khola MHP	Pyuthan	Rajwara-5	17	254
17	Forsa Chhanga MHP	Ramechhp	Saipu -7	8	68
18	Shree Chhhahare Khola I MHP	Lamjung	Illampokhari -6	9	81
19	Tamajor Khola MHP	Sindhuli	Sitalpati	15	180
20	Dhanchauri Pani Mul Khola MHP	Jumna	Dhanchauri	20	287
21	Cheura Gad MHP	Rolpa	Wot	22	343
22	Chhipra Khola MHP	Rukum	Pipal	19	178
23	Ruparani MHP	Jumna	narakot	16	175
24	Baudi Khola I MHP	Nawalparasi	Ruching	11	169
25	Regam Khola MHP	Bajhang	Dangaji	42	567
26	Chhopta Khola MHP	Dhading	Sertung	40	340
27	Cherkhe Khola MHP	Khotang	Sundel-3	50	483
28	Khamari Khola MHP	Surkhet	Babayachaur	53	620
29	Thotne Khola Chaman MHP	Okhaldhunga		14	163
30	Charnalu Khola MHP	Okhaldhunga	Khijikati	12	115
31	Naudhari Khola MHP	Rukum	Shyalapakha-9	16	205
32	Lukum Khola MHP	Rukum	Kankri-6	85	850
33	Baudi Khola MHP	Palpa	Bakamalang-3	11	157
34	Chanchalghat MHP	Baglung	Ranasingkiteni-2	100	918
35	Biju Bidyapur Khola MHP	Surkhet	Bidyapur	11	254
36	Raudagad MHP	Bajura	Dahakot-3	30.5	278
37	Nagmagad MHP	Kalikot	Phoimahadev	57	630
38	Khorlabesi Lunget Khola MHP	Gorkha	Uiya	26	218
39	Andheri Khola MHP	Dhading	Budathum	8	67
40	Rakula Khola MHP	Udaypur	Thanagaun	25	250
41	Karamkot Khola MHP	Nawalparasi	Jaubari	14	150
42	Kukurfalna MHP	Humla	Kalika-8	100	630

SN	Project	District	VDC	kW	HH
43	Bachhe Khola MHP	Rolpa	Seram-5	20	170
44	Dhangdhange Khola MHP	Taplejung	Limbudin-8	20	177
45	Thawa Khola MHP	Ilam	Phuyatappa-1	18	164
46	Shahupata Khola MHP	Bajhang	Jay prithhivi	9	108
47	Bajai Khola PHP	Rolpa	Uwa-4	9	127
48	Ghari Khola MHP	Rukum	Magma-8	14	151
49	Patal Khola MHP	Rukum	Sakh-4,5	18	158
50	Jalakanya kamere MHP	Solukhumbu	Kerung-7	15	185
51	Mangala Kharka Sisne Phedi	Okhaldhunga	Khiji phalate-2	26.5	248
52	Khara Putalibas Khola MHP	Rukum	Khara-1	12	130
53	Muru Khola II PHP	Rukum	Muru-5	8	115
54	Phulmadi Khola MHP	Nawalparasi	Bharatipur-1,2,9	6.5	128
55	Jama Khola MHP	Rukum	Shayalapakha-5	90	1035
56	Lower Chiuri Khola MHP	Rukum	Pokhara-9	14	165
57	Dari Khola MHP	Jumla	Tamti-3	25	270
58	Biurabari MHP	Jajarkot	Khalanga-8	15	162
59	Sankh Khola II MHP	Rukum	Sankh-3	28	270
60	Singla Dimpa Khola MHP	Gorkha	Gumda	14.4	175
61	Muhan Khola Jordhara MHP	Solukhumbu	Jubu-7	14	230
62	Milti Khola I MHP	Remechhap	Daduwa-1	16.5	171
63	Chauri Khola MHP	Kavre	Majhipheda-1	48.37	685
64	Badigad Khola MHP	Gulmi	Neta-2	100	912
65	Kagmara Khola MHP	Dolpa	Phokshundo-6-9	15	84
66	Kasil Khola MHP	Dolpa	Kalika-1,9	25	304
67	Bheri Khola MHP	Rukum	Chaukhabang-9	23	335
68	Chhamgad Khaniyapata MHP	Dailekh	Kasikadh	10.5	185
69	Khara Pipalbot Khola MHP	Rukum	Khara-7	17	170
70	Jharbang Chancheri Khola MHP	Rukum	Khara-9	20	207
71	Veng Khola MHP	Rolpa	Ghartigaun -3	20	190
72	Selagad Chiltada MHP	Achham	Kalekanda-1,2,	17	155
73	Sanghura Khola Saharin MHP	Rolpa	Rankot -2	65	749
74	Kuje Gar Satlimare Madi Khola	Rolpa	Talabang-8	92	972
75	Dude Khola Mahabhir Chautho	Okhaldhunga	Gamnangtar-	11	131
76	Jeude Gad N0.2 MHP	Bajhang	Daulichur -5	27	292
77	Jebregad MHP	Bajhang	Daulichur -8	22	228
78	Bhujan Gad MHP	Bajura	dogadi-6	14	199
79	Malagad MHP	Bajura	Kailashmandu-2	100	1163
80	Dahachhal MHP	Bajura	Bandhu -1	15	214
81	Barjugad MHP	Bajura	Gadukhati-3	40	502
82	Rilugad MHP	Bajhang	Rilu-5	32	266
83	Kalagad Khola MHP (REHAB)	Darchula	Bramhadev-8	43	453
84	Dogadegad MHP	Bajhang	Masta-8	46	490
85	Dwarigad MHP	Bajhang	Rilu-8	42	438

SN	Project	District	VDC	kW	HH
86	Lachhi Gad MHP	Bajhang	Bhatekhola -	18	248
87	Juwanadi MHP	Jumla	Patmanra	14	118
88	Bhartagad MHP	Kalikot	Bharta-2	50	470
89	Lahare Khola MHP	Jajarkot	Khalanga-7	16.5	221
90	Maluwa Fokta MHP	Jumla	Mahaboi	31	420
91	Veri Khola MHP	Jumla	Kudari	21	237
92	Lahare Khola MHP	Jajarkot	Laha	24	307
93	Okhergad Ghatte Khola MHP	Kalikot	Ranchuli	18.5	166
94	Kurila Mulpani MHP	Humla	Dandafaya	20	170
95	Santa Khola Dapkana MHP	Jumla	Dhapa	11	115
96	Khada Khola MHP	Jajarkot	Tale	54	540
97	Dokhu Khola PHP	Jajarkot	Khagenkot	9	95
98	Gagra Khola MHP	Jajarkot	Rokayagaun	83	749
99	Sobuwa Khola II MHP	Taplejung	Hangpang-8	90	799
100	Kanwa Khola MHP	Taplejung	Thinlabu-1	21	232
101	Shree Sapsu Nibu Khola MHP	Panchthar	Imbung-1	43	360
102	Thawa Khola Raikar MHP	Ilam	Phuyatappa-1.9	20	190
103	Akuwa Khola Chisapani MHP	Bhojpur	dummana-7	33	275
104	Righiwa Khola MHP	Panchthar	Sidin-1	50	459
105	Kunikhop Khola MHP	Okhaldhunga	Salleri	12.5	81
106	Ghatte Khola MHP	Solukhumbu	Juving -2	11	102
107	Molung Khola Kartike MHP	Okhaldhunga	Baruneshwor-3	100	1011
108	Silkhu Khola Pasaltar MHP	Okhaldhunga	Singhadevi-1	30	313
109	Midim Khola MHP	Lamjung	Lsaneshwor-1	100	850
110	Kubinde Pachase Khola MHP	Dhading	Katunje-4	18	186
	Total			**3486**	**36068**

B. Details of installed Pico Hydro s in FY 2070/71

SN	Project	District	VDC	kW	HH
1.	Ghatte Khola PHP	Makawanpur	Dandakharka -5	5	70
2.	Sange Padhera IWM Electrification	Dolakha	Bulung-5	1.5	34
3.	Nisti Sahare Khola PHP	Gulmi	Hwangdi-7	2	40
4.	Nunthala BhaikmareKharsalla (Panaha Khola) PHP	Gulmi	Bhanbhane-3	5	77
5.	Rakash Khola PHP	Makawanpur	Dhiyal-1	3	36
6.	Klungmang Khola PHP	Makawanpur	kankada-9	3.5	30
7.	Tallo Ghatte Khola PHP	Makawanpur	Dandakhark -5	5	60
8.	Mahadev Khola Peltric Set Aayojana	Ramechhap	Preeti-1,2	5	52
9.	Thade Khola Peltric Set Aayojana	Sindhuli	Mahadevdanda-	2	34
10.	Bharuwa Khola Peltric Set Aayojana	Udayapur	Tawashree-3	2	19
11.	Chapleti Khola Peltric Set Aayojana	Udayapur	Tawashree -3	3	22
12.	Chhipi Khola Peltric Set Aayojana	Udayapur	Hardeni-2	2	28

SN	Project	District	VDC	kW	HH
13.	Bep Khola 'Kha' Peltric Set Aayojana	Baglung	Devisthan-6	3	36
14.	Khurmi Khola Peltric Set Aayojana	Lalitpur	Gimdi-6	4	40
15.	Lakuri Khola Peltric Set Aayojana	Lalitpur	Gimdi-6,7	3	33
16.	Badura Khola II PHP	Udayapur	Lekhani-2	5	41
17.	Khari Khola PHP	Udayapur	Bhutar-8	5	60
18.	Patle Khola Hanumanthan PHP	Okhaldhunga	Bilandu--6	4	40
19.	Malema Khola PHP	Khotang	Bhahunidada 1,2	1	31
20.	Chap Khola PHP	Khotang	Bhahunidada 4,5	1.5	30
21.	Bhadi Khola PHP	Udayapur	Nametar-6	2.5	24
22.	Thado Khola PHP	Udayapur	Nametar 2,3	4	46
23.	Selele Suryakunda PHA	Nuwakot	Ghyangpaedi-6	5	59
24.	Illdi Khola PHP	Nawalpasari	Jaubari-1	4	87
25.	Lapang Khola IWM Electrification	Dhading	Semjung-9	1.5	15
26.	Boudi Khola Labe IWM Electrification	Nawalpasari	Rakuwa-7,8	2	30
27.	Kali Khola Set Set Project	Kavrepalancho	Ghartichhap-1	3.75	62
28.	Dandru Khola PHP	Ramechhap	Preeti -7&8	5	60
29.	Thado Khola PHP	Dolakha	Bulung-5	2	25
30.	Thulo Khola Peltric Set Aayojana	Okhaldhunga	Jantarkhani-	5	56
31.	Dhapkhani Khola Pico Hydro	Sindhuli	Balajor-1	5	86
32.	Chitra Khola Deurali Gelsim PSA	Sindupalchowk	Bhotang-1	5	45
33.	Bange Khola PH Electrification Project	Kavrepalancho	Dadagaun-7	2	29
34.	Mayankhu Khola PHP	Udayapur	Mayankhu-9	5	43
35.	Tintar IWM Electrification Project	Makawanpur	Betini-5	2	25
36.	Mekhu Khola PHP	Khotang	jaleswori-8	5	74
37.	Simle Khola PHP	Khotang	Jalesori-2	5	45
38.	Rakche Khola PHP	Udayapur	katunje Babla-6	4.5	42
39.	Janajagriti IWM Electrification Project	Makawanpur	Kakada-8	4	45
40.	Sardi Khola PHP	Makawanpur	Manthali-7	2	25
41.	Fung Khola PHP	Ilam	Gajurmukhi-3	1.5	27
42.	Fewa Khola Sangrim PHP	Ilam	Gajurmukhi-9	2	18
43.	Makaibari PHP	Panchthar	Lungrupa--2	2	43
44.	Dhandkharka Peltric Set Aayojana	Ramechhap	Kubukasthali-3	3	31
45.	Bhumke Khola Peltric Set Project	Rukum	Peugha-8	4	62
46.	Thulokhoriya Bachhiu Khola PSP	Rukum	Muru-6	2	45
47.	Langhali Peltric Set Project	Ilam	Phuyatappa-7	3	35
48.	Raate Khola PHP	Taplejung	Yamphudin	4	38
49.	Syar Shyong Khola PHP	Gorkha	Manbu	5	42
50.	Maha Khola Peltric Set Project	Dhading	Zamrung-2	3	30
51.	Bidhuwani Khola PHP	Panchthar	Sarangdanda-9	5	50
52.	Ithung Khola I Peltric Set	Panchthar	Ranitar-8	3	30
53.	Sacho Khola PHP	Panchthar	Ranitar-9	5	50
54.	Shenghewa Khola Peltric Set Project	Panchthar	Kurumba -4	2.5	25
55.	Ithung Khola II Peltric Set	Panchthar	Ranitar-9	5	50

SN	Project	District	VDC	kW	HH
56.	Dovan Pico Hydro Project	Solukhumbu	Gorakhani --2	5	52
57.	Panale Bass PHP	Chitwan	Lother-7	5	74
58.	Lesu Khola PHP	Ramechhap	Bhugi-8	5	42
59.	Aaru Khola Devisthan PHP	Sindhuli	Kusheshwar-9	5	52
60.	Hile Khola Piple Dovan Peltric Set	Ilam	Lumde-4	4	51
61.	Boudi Khola PHA	Nawalpasasi	Mithukaram-7	3.5	47
62.	Mauti Khola PSA	Dhading	Jogimara -5	2	36
63.	Bep Khola PHP	Myagdi	Divistham -5	4	57
64.	Parigaun Khola PHP	Bajura	Dhauligada-	5	62
65.	Kailash Khola PHP	Bajura	Wai -4	5	62
66.	Bajhkharka Khola peltric Set	Bajura	Aatichaur	4.5	110
67.	Badahara Pico Hydro Project	Chitwan	Korak-1	5	171
68.	Likhu Khola PHP "KHA"	Nuwakot	Likhu -1	4.5	42
69.	Laiserang Khola PHP	Makwanpur	Raksirang-8	4	57
70.	Raga Khola PHP	Makwanpur	Kankada-4	5	77
71.	Tila Khola PHP	Rukum	Kol-1	5	50
72.	Tallo Kharkhara Khola PHP	Rukum	Aathbiskot-3	4	40
73.	Budbude Khola PHP	Rukum	Asthiskot-4	5	50
74.	Mahavir Khola PHP	Bhojpur	Bhainsipankha-3	3	37
75.	Thale Danda PHP	Terhathum	Khamlalung-8	3	28
76.	Khor Khola Peltric Set	Nawalparasi	Dhurkot-9	3	30
77.	Chirkhuwa Khola PHP	Bhojpur	Nepaledanda -5	5	62
78.	Seto Khola Jaributte PHP	Panchthar	Lungruppa -2	2	17
79.	Mangen Khola PHP	Nuwakot	Ghyangphedi-8	5	57
80.	Vyakure Banspur PHP	Kavrepalancho	Saldhara-4	3	49
81.	Kattike Thulokholsi PHP	Solukhumbu	Kandel	5	67
82.	Chokte Khola II PHP	Ramechhap	Saipu-7	3	69
83.	Seto Khola PHP	Ramechhap	Preeti-3	5	75
84.	Serakhet Khola PHP	Jajarkot	Paink-4	5	65
85.	Nisti Sawane Pani Chautara PHP	Gulmi	Hwangdi 8&9	3.5	100
86.	Thara Khola Peltric Set	Rukum	Chunbang3,4	3	30
87.	Chahari Khola Peltric Set	Rukum	Chara-2	3	30
88.	Lai Khola Seltric set	Palpa	Devinagar	3	30
89.	Chituwa Khola Peltric Set	Palpa	Mytal	2.5	25
90.	Thotne Khola PHP	Terhathum	Khamlalung-8	2	20
91.	Rachaya Chahare Khola PHP	Lamjung	Bichour-9	4.5	40
92.	Devi Khola PHP	Khotang	Waplukha-1	3	44
93.	Gopi Khola PHP	Khotang	Temma-4	3	33
94.	Andhari Khola PHP	Khotang	Likuwapokhari-4	5	75
95.	Pangadi Khola PHP	Nawalparasi	Naram-8	2	32
96.	Pani ghatta Pico Hydro Project	Nawalparasi	Mithukaram-9	1	18
97.	Talu kaseri Peltric Set Aayojana	Nuwakot	Ghyangphedi-1	4	41
98.	Nirandi Khola II PHP	Nawalparasi	Naram-2	4	51

SN	Project	District	VDC	kW	HH
99.	Chuwardi Khola III PHP	Nawalparasi	Naram-3	5	86
100.	Likuwa Khola PHP	Khotang	Likuwapokhari-2	5	63
101.	Lahache Khola PHP	Khotang	Badka Diyale-2	3	46
102.	Luma Khola PHP	Khotang	Baplukha-4	3	46
103.	Tawa Khola PHP	Khotang	Temma-9	5	111
104.	Dhiplung Khola PHP	Khotang	Temma-4	3	45
105.	Sawa Khola PHP	Khotang	Sawa-7	5	82
106.	Okherbot Khola PHP	Gorkha	Thumi-9	3	33
107.	Lundo Khola PHP	Gorkha	Thumi-9	2.5	40
108.	Bhalu Khola PHP	Nawalparasi	Jaubari-4	4	73
109.	Ghatte Khola PHP	Ramechhap	Doramba-6	5	68
110.	Tribeni Khola PHP	Ramechhap	Preeti 7,8	5	60
111.	Andhari Khola PHP	Ramechhap	Doramba-8	5	90
112.	Kali Khola Peltric Set	Makwanpur	Betini-5	3.5	66
113.	Gauri Khola Peltric Set	Makwanpur	Betini-1	3	27
114.	Sukaura Khola Peltric Set	Makwanpur	Sukaura-7	3	30
115.	Makki Khola 'Kha' PHP	Myagdi	Niskot-7	4.5	60
116.	Ghosem Khola PHP	Myagdi	Niskot-8	3	32
117.	Thulo Khola Tusarne II PHP	Myagdi	Darbang-4	3.5	32
118.	Luliya Khola PHP	Myagdi	Darbang-4	2.5	35
119.	Poshi Khola PHP	Kaski	Mijuredanda	5	43
120.	Nilo Pahara Khola PHP	Myagdi	Kuhun--6	5	62
121.	Ghodatanna Khola Peltric Set	Kandel-	Bajhang	5	60
122.	Nisti Khola I PHP	Darling -5	Gulmi	5	53
123.	Nisti Khola II PHP	Darling -8	Gulmi	5	50
124.	Jakus Khola PHP	Lullang-5	Myagdi	3	28
125.	Gumansing Khola PHP	Makawanpur	Betini-7,8	1.5	27
126.	Bheri Khola Silpalauna Dharma Shala	Jajarkot	Dandagaun	5	60
127.	Bhateni Khola PHP	Jajarkot	Paink	3.5	76
128.	Chanduwa khola II PHP	Sandhuwasabh	Mangtewa - 5,9	5	43
129.	Bhote Khola PHP	Ilam	Fuyatappa -7	5	44
130.	Darpali Khola PHP	Panchthar	lungrupa-6	2	31
131.	Luwafu Khola PHP	Panchthar	Sidin-9	3	33
132.	Andhari Khola PHP	Panchthar	Lungrapa-6	3	31
133.	Andhari Khola II PHP	Panchthar	Lungrapa-6	1	20
134.	Mabewa Khola II PHP	Panchthar	Sidin-5	5	53
135.	Dharam Khola PHP	Panchthar	Ranitar-9	3	33
136.	Chuplawa Khola PHP	Panchthar	Sidin-5	5	61
137.	Badahare Khola II PHP	Bhojpur	Kulung-2	1	9
138.	Tin Dovan Niwa Khola PHP	Panchthar	Mereng -4	5	58
139.	Kurumba Khola PHP	Panchthar	Kurumba-2	2	24
140.	Pangtuwa Khola PHP	Panchthar	Kurumba-7	5	62
141.	Shree Jaringe	Panchthar	Ektin-7	5	52

SN	Project	District	VDC	kW	HH
142.	Pingdhunga Lapse Khola PHP	Kavrepalancho	Walting-5	5	70
143.	Holbang Mulkhola PHP	Gulmi	Banjhkateri-1	2	30
	Total			**527.2**	**6,807**

C. List of DFS completed projects

S	Project	District	VDC	kW	Propose
1	Mokporang Khola MHP	Dolpa	Bhijer-5	15	96
2	Mhay Khola MHP	Dolpa	Tinje -5	52	260
3	Nase Khola MHP	Dolpa	Dho-8	42	214
4	Kumas Khola MHP	Dolpa	Saldang-8	80	517
5	Pache Kawa Khola MHP	Mugu	Gamtha	25	312
6	Solu Khola MHP	Solukhumbu	Kagel	100	968
7	Rakuli Khola MHP	Udayapur	Bansabote	45	441
8	Balikuna Khola MHP	Kalikot	Kumal Gaun-6	90	794
9	Dhanchu Khola MHP	Kalikot	Milkot-6	100	841
10	Molung Khola katlechaur MHP	Okhaldhunga	Chyanam -8	100	849
11	Nandibang Khola MHP	Myagdi	Malkabang -2	42	212
12	Phedi Khola MHP	Baglung	Adhikarichaur-5	14	199
13	Okhatya Gaida MHP	Jajarkot	Bhur-5	15	240
14	Molung Khola Gyalmu MHP	Okhaldhunga	Sisneri	53	438
15	Bhande naumul MHP	Dailekh	Dwari-5	14	118
16	Bet Khola Micro Hydro Project	Surkhet	Bijaura-3	16	107
17	Sot Khola MHP	Surkhet	Kunathari-4	28	366
18	Daha Taal MHP	Surkhet	Betan-3	11	146
19	Khamari Khola II MHP	Surkhet	Babiyachaur-8	15	151
20	Biwang Khaber Khola MHP	Rolpa	Gaam-6	15	207
21	Mangrawang Khola MHP	Rolpa	Uwa-8	10.3	153
22	Chiuri Khola MHP	Rolpa	Gumchal-7	10.5	170
23	Takchuwa Khola PHP	Morong	Warangi-9	10	50
24	Tara Khola Samudayik Mini Hydropower	Baglung	Tara-	446	2200
25	Furchang Chahare Khola MHP	Humla	Kharpunath-1,2	15	95
26	Darim Gad MHP	Bajhang	Dahabagar	28	280
27	Sapsu Khola MHP	Khotang	Nirmali Danda -	11	105
28	Giri Khola Mini/Hydropwer Project	Jumla	Haku	200	1840
29	Bagah Khola MHP	Nawalparasi	Rajahar--9	13	130
30	Chinde Khola MHP	Sankhuwasab	Sabhapokhari	20	169
31	Shiva Shakti Bira Him Nadi MHP	Jumla	Kalika Khetu-7	43	427
32	Chherwang Patle Khola MHP	Myagdi	Ruma-7	11.5	110
33	Majuwa kuine Khani MHP	Myagdi	Kuine Mangale	20	120
34	Rato Khola Bagara MHP	Myagdi	Mudi-9	11	66
35	Dhoreni Khola MHP	Jajarkot	Nayakwada	51	418
36	Malagad Khola III MHP	Bajura	Kalishmandu	100	616

S	Project	District	VDC	kW	Propose
37	Shivaduti Multiporpose MHP	Okhaldhunga	Sisneri-	100	907
38	Nawa Khola MHP IV	Panchthar	Limba-3	30	192
39	Nawa Khola MHP III	Panchthar	Arubote-4	40	331
40	Dhad Khola MHP	Kalikot	Chappre-6	32	235
41	Ghaterigad MHP	Bajhang	Sunkuda-3	8	65
42	Jolavan Khola MHP	Doti	Laxminagar-2	12	199
43	Kabeli Khola MHP	Taplejung	Yamfudin-9	15	75
44	Khokse Khola Banchare MHP	Taplejung	Nankholyang-	19.5	208
45	Nagdewa Khola MHP	Taplejung	Tellok-6	22	175
46	Niwa Khola III MHP	Panchthar	Ektin-1,2	21	177
47	Isuwa Khola MHP	Sankhuwasab	Makalu-7	90	445
48	Sot Khola MHP	Surkhet	Kunathari-4	28	366
49	Daha Taal MHP	Surkhet	Betan-3	11	146
50	Sisuwa Khola Chatekma MHP	Sankhuwasab	Sisuwa -9	58	290
51	Sanouku Khola MHP	Okhaldhunga	Ketuke	28	237
52	Gaskur Khola MHP	Rukum	Rangsi-8	23	239
53	Pache Kawa Khola MHP	Mugu	Gamtha	25	312
54	Mangmaya Khola II MHP	Taplejung	Sanghu-1	62	346
55	Bir janta Shahit Chadaha Khola MHP	Sindhuli	Balajor -6	23	240
56	Dhostekhor Khola MHP	Myagdi	Shikha-5	30	
57	Bhitra Khola MHP	Jumla	Badki-9	25	274
58	Wachimle Khola MHP	Bhojpur	Annapurna-9	40	374
	Total			2614.	20258

D. List of TRC/Conditionally Approved Projects

S.N.	Name of MHP	District	VDC	kW	Proposed HH
1	Kawadi Khola MHP II	Bajura	Rugin	100	1078
2	Dobre Khola PHP	Achham	Binayak	7	100
3	Dhorpatan Bhuji Khola	Baglung	Bobang	60	701
4	Ratamata Bhitri Khola	Rolpa	Budagaun	6	92
5	Palle Aambagar MHP	Doti	Girichauka	60	607
6	Rota Gad MHP	Bajhang	Banjh	24	253
7	Halesi Chairi Khola MHP	Achham	Basti	60	608
8	Kalsyong Khola II MHP	Dhading	Ri	12	98
9	Lachi Gad Khola MHP	Bajhang	Bhatekhola	24	221
10	Tarugad MHP	Bajhang	Matela	27	236
11	Lokante Khola MHP	Bajhang	Kanda	18	160
12	Jadari Gad MHP-2	Bajhang	Malumela	52	496
13	Kheste Khola III PHP	Dhading	Baireni	6	69
14	Salpu Khola-4 MHP	Okhaldhunga	Khiji	8	114
15	Mul Khola I Pico Hydro	Rolpa	Ota-7	9	109

S.N.	Name of MHP	District	VDC	kW	Proposed HH
16	Siruwali Khola MHP	Rolpa	Jugar	6	79
17	Thulasim Khola MHP	Rukum	Garayala	17	110
18	Jugar Khola Micro	Rolpa	Jugar-3	10.5	105
19	Ghattegad Khola MHP	Bajura	Kante	18	254
20	Tharunigad MHP	Bajhang	Kanda	22	166
21	Gandi Gad MHP	Doti	Gajari	90	832
22	Juligad II MHP	Bajhang	Maulali	76	780
23	Deuta Khola Murigar	Rukum	Duli	13	77
24	Mirgichhahara Khola	Rukum	Magma	13	120
25	Mul Khola II Micro	Rolpa	Ota-6	10.5	112
26	Upper Pedi Khola MHP	Rukum	Arma	39	448
27	Pachhedhunga Micro	Rolpa	Gairigaun-8	10.5	108
28	Jigadi Gad MHP II	Achham	Ghughurkot	22	860
29	Gad jyula Pico Hydro	Dailekh	Badlmji	6.5	102
30	Sakcha Khola II MHP	Rukum	Nuwakot	12	147
31	Daha Khola MHP	Rukum	Magma	20	137
32	Dawa Khola MHP	Rukum	Magma	18.5	116
33	Sukgad II MHP	Bajhang	Dhamena	16	127
34	Okhatya Gaida MHP,	Jajarkot	Bhur	15	240
35	Dogade Ghatte MHP	Bajhang	Bamchaur	55	420
36	Khasksewa Khola MHP	Taplejung	Pedang and	70	627
37	Hadi Khola MHP	Taplejung	Liwang	38	320
38	Kharkhar Khola MHP	Rukum	Athbiskot	40	560
39	Rakuli Khola MHP	Udaypur	Bansabote	45	441
40	Daha Khola MHP	Rukum	Magma	20	137
41	Bhande Naumul Micro	Dailekh	Dwari	14	118
42	Ranigad khola MHP	Bajhang	Dangajee	15	125
43	Chhamgad Kusapani	Dailekh	Kusapani	26	285
44	Khun Gad Micro Hydro	Dailekh	Singasain	42	465
45	Kumas Khola MHP	Dolpa	saldang	80	517
46	Mhay Khola	Dolpa	Tinje	52	260
47	Mokporang Khola	Dolpa	Bhijer	15	96
48	Solu Khola MHP	Solukhumbu	Kangel	100	803
49	Molung Khola Gyalmu	Okhaldhunga	Sisneri	53	438
50	Majkot Khola MHP	Jajarkot	Majhkot	100	933
51	Tara Khola Samudayik	Baglung	Tara	394	2200
52	Nase Khola MHP	Dolpa	Dho	42	214
53	Pashe Khola MHP	Dhading	Pedang and	100	1053
54	Mugre Khola MHP	Lamjung	Karapu-5	10.1	115
55	Darim Gad MHP	Bajhang	Dahabagar	28	280
56	Urja Khola V MHP	Baglung	Damek	40	192
57	Manrawang Khola	Rolpa	Ulwa	10.3	153
58	Chiuri Khola MHP	Rolpa	Gumchal	10.5	170

S.N.	Name of MHP	District	VDC	kW	Proposed HH
59	Biwang Khaber Khola	Rolpa	Gaam	15	207
60	Molung Khola Simbesi	Okhaldhunga	Mulkharka	100	1000
61	karung Khola MHP	Gulmi	Wami	11	98
62	Balikuna Khola MHP	Kalikot	Kumal Gaun	90	794
63	Dhanchu Khola MHP	Kalikot	Malkot	100	841
64	Sapsu Khola MHP	Khotang	Nirmal dada	11	105
65	Bet Khola MHP	Surkhet	Bijaura	16	107
66	Khamari Khola II MHP	Surkhet	Babiyachaur	15	151
67	Chinde Khola MHP	Sankhuwasabha	Sabhapokhari	20	169
68	Sanigad Khola MHP	Bhajang	Khiratadi	38	238
69	Nandibang Khola MHP	Myagdi	Malkabang	42	212
70	Phedi Khola MHP	Baglung	Adhikarichaur	14	199
71	Giri Khola Mini	Jumla	Haku	200	1840
72	Malagad Khola-III MHP	Bajura	Kailashmandu	100	616
73	Furchang Chahare	Humla	Kharpunath	15	95
74	Majuwa Kuine Khani	Myadgi	Kuine Mangale	20	120
75	Chherwang Patle	Myadgi	Ruma	11.5	110
76	Rato Khola Bagara	Myadgi	Mudi	11	66
77	Sunigad Khola MHP	Bajhang	Chainpur	55	350
78	Chirling Khola MHP	Bhojpur	Sindrang-1	26	229
79	Bira Bagar Sera Mini	Mugu	Sukadhik	500	4247
80	Nawa Khola MHP III	Panchthar	Arubote-4	40	331
81	Nawa Khola MHP IV	Panchthar	Limba-3	30	192
82	Kabeli Khola MHP	Taplejung	Yamfudin-9	15	75
83	Nagdewa Khola MHP	Taplejung	Tellok-6	22	175
84	Shivaduti	Okhaldhunga	Sisneri	100	907
85	Sot Khola MHP	Surkhet	Kunathari	28	366
86	Chuhaban Khola MHP	Bajhang	Sainpesala	15	118
87	Ghaterigad PHP	Bajhang	Sunkuda	8	65
88	Jolavan Khola MHP	Doti	Laxminagar	12	94
89	Daha Taal MHP	Surkhet	Betan	11	146
	Total			**4000**	**35047**

E. List of Final Approval (under construction) MHPs

SN	Project Name	District	VDC-ward	kW	HH
1	Tubang Khola MHP	Rukum	Pwang	33	432
2	Khani Khola MHP	Sindhuli	Santayswori	13	110
3	Ladi Khola I MHP	Nawalparasi	Dandajhari	27	226
4	Kaku Khola II Community MHP	Solukhumbu	Kaku-3	50	477
5	Solu Khola Gangku MHP	Solukhumbu	Panchan	100	1070
6	Dude Khola Mahavir IV MHP	Okhaldhunga	Gamnangtar-6	11	131

SN	Project Name	District	VDC-ward	kW	HH
7	Triveni Solu Khola MHP	Panchther	Lungrupa-8	35	312
8	Irkhuwa Khla MHP	Bhojpur	Chaukidanda-3	28	238
9	Pire Khola MHP	Dailekh	Pliadi-	32	233
10	Phulmadi Khola MHP (PHP)	Nawalparasi	Bharatipur-1	6.5	128
11	Doreni Khola MHP	Jajarkot	Nayakwada-9	51	418
12	Simtara MHP	Jajarkot	Sakla-6	52	516
13	Nimre Khola MHP	Rolpa	Korchabang-4	12	110
14	Kuchibang Khola MHP	Rukum	Rukumkot-4	19	190
15	Durali Chhhahara MHP	Rolpa	Wot-2	16	330
16	Dowar Khola MHP	Rolpa	Gam-9	11	96
17	Kali Khola MHP	Taplejung	Kalikhola-8	15	125
18	Tribeni Kakri Khola MHP	Rukum	Kakri-1	45	425
19	Patle Chitre Khola MHP	Okhaldhunga	Bilandu-4	16	204
20	Oyam Thado Khola III MHP	Panchthar	Oyam-7	21.5	223
21	Aafal Khola MHP	Dhaning	Gumdi-2	100	1151
22	Pumpa Khola MHP	Ramechhap	Preeti-6	20	200
23	Rawa Khola MHP	Khotang	Baksila-1	100	972
24	Chhiku MHP	Solukhumbu	Waku-1	10.5	99
25	Kuhi Khola MHP	Nawalparasi	Dhaubadi-6	21	263
26	Maili Khola dovan Kupang Khola MHP	Solukhumbu	Goli-	75	489
27	Kholpe Khola MHP	Dhaning	Sertung	100	720
28	Dhangri Gad MHP	Bajhang	Kotdewal	18	320
29	Sipre Khola PHP	Bajhang	Kadel-3	9	162
30	Dhunduri Khola Jal Bidhyut Aayojana	Dhaning	Jharlang-7	66	245
31	Arung Khola MHP	Nawalparasi	Rakachuli-1,5,6,7,8,9	32	400
32	Sapsu Khola MHP	Khotang	Nirmali Danda-2	11	105
33	Tuni Khola MHP	Baglung	Jaljala-6	42	387
34	Rithali Khola MHP	Bajhang	Banjh -3	22	208
35	Tusari Gad MHP	Bajura	Dahakot-	32	271
36	Ikadi Gad-II MHP	Bajura	Barabis	100	1117
37	Satigar Khola MHP	Rukum	Purtimkada	18	180
38	Simli Khola MHP	Rukum	Simli-1	29	291
39	Rol Khola MHP	Rukum	Simli-3	33	346
40	Mala Gad II MHP	Bajura	Brahmatola-2	34	478
41	juilgad II MHP	Bajhang	Maulali -4	76	780
42	Dhurilla Lachhi Khola MHP	Bajhang	Masta-1,2,,3,4	18	210
43	Tunda Gad MHP	Doti	Chawarachautara-	65	585
44	Kut Khola III MHP	Baglung	Rajkut-6	20	194
	Total			**1645.5**	**16167**

F. List of Completed RSDWP Projects

S. N	Project Name	Address	Approved Subsidy	60%
1	Jogineta RSDWP	Kholagaun-3, Rukum	1,500,000.00	900,000.00
2	Dahakhola RSDWP	Purtimkanda -4, Rukum	1,500,000.00	900,000.00
3	Giddedanda RSDWP	Sakhar -2, Syangja	1,500,000.00	900,000.00
4	Odarejore Dhara RSDWP	Balakhu -1, Okhaldhunga	1,500,000.00	900,000.00
5	Barkhe Khola RSDWP	Bulung-4, Dolakha	1,500,000.00	900,000.00
6	Chaap Dhara RSDWP	Khare-5, Dolakha	1,500,000.00	900,000.00
7	Muldhara RSDWP	Mahamai-3, Ilam	1,149,958.00	689,975.00
8	Setapaira RSDWP	Garpan-7, Surkhet	1,500,000.00	900,000.00
9	Dopka RSDWP	Lalikanda-4, Dailekh	1,500,000.00	900,000.00
10	Dharapani RSDWP	Taranga-1, Surkhet	1,500,000.00	900,000.00
11	Patuat RSDWP	Melauli-1,2 Baitadi	1,500,000.00	900,000.00
12	Srinjanshil Jhakri Khola	Ghiring Sundhara -3,	1,500,000.00	900,000.00
13	Chisopani Khanepani RSDWP	Sunaulo Bazar- 4, Dhading	1,500,000.00	900,000.00
14	Devisthan RSDWP	Sahalkot-6, Palpa	1,500,000.00	900,000.00
15	Sisnepani RSDWP	Barchhain-9, Doti	1,417,234.00	850,340.63
16	Tambu Khola RSDWP	Sukhura-6, Baglung	1,500,000.00	900,000.00
17	Kause khola RSDWP	Dhiyal-8, Makwanpur	1,500,000.00	900,000.00
18	Tapli RSDWP	Lekhguan-3,Udaypur	1,421,000.00	852,600.00
19	Simkhola RSDWP	Kettuke-8,Okhaldhunga	1,600,000.00	960,000.00
20	Jhamane Gaira RSDWP	Lekhguan-3, Udayapur	1,323,500.00	794,100.00
21	Semle Khola RSDWP	Katunjebawala-7,Udayapur	1,602,500.00	961,500.00
22	Lukuwa Dhunga RSDWP	Thulachhap-1, Okhaldhunga	1,570,000.00	942,000.00
23	Sharki Khola RSDWP	Katunjebawala-2,Udayapur	1,318,577.00	791,146.20
24	Yari RSDWP	Karati -5, Rolpa	1,702,500.00	1,021,500.0
25	Adheri Khola RSDWP	Khadavevi-2,Ramechhap	1,645,000.00	987,000.00

G. District wise List of Ongoing ISPS and PVPS

S.N	Project Name	VDC	District
1	Jamuma Mul RSDWP	Muli	Achham
2	Dharapani RSDWP	Binayak	Achham
3	Koirelikhola RSDWP	Girichuka	Doti
4	Dapcha RSDWP	Sahare	Surkhet
5	Naitedalka RSDWP	Rawatkot	Dailekh
6	Sarkikhadi RSDWP	Rawatkot	Dailekh
7	Kailmela RSDWP	Awalparajul	Dailekh
8	Gaira Bans ko Ghyang Muni RSDWP	Awalching	Surkhet
9	Dhanmang RSDWP	Nuwagaun	Rolpa
10	Tikhanvir RSDWP	Budhagaun	Rolpa
11	Dhapkhola RSDWP	Hasipur	Dang
12	Chiurikhola RSDWP	Gairigaun	Rolpa

S.N	Project Name	VDC	District
13	Chhahara RSDWP	Maidan	Arghakhachi
14	Dharapani Mul RSDWP	Ghiring Sundhara	Tanahun
15	Cherpadi Kholsi RSDWP	Gajarkot	Tanahun
16	Keuradi RSDWP	Gajarkot	Tanahun
17	Thotima RSDWP	Kurumba	Panchthar
18	Gadare RSDWP	Ravi	Panchthar
19	Dadui RSDWP	Mahamai	Ilam
20	Nagi RSDWP	Arubote	Panchthar
21	Kali Khola RSDWP	Danabari	Ilam
22	Yangkhuwa RSDWP	Angna	Panchthar
23	Rumdhum RSDWP	Deulek	Bajhang
24	Aampani RSDWP	Sirsha	Dadeldhura
25	Bagcheda RSDWP	Kamalamai Municipality	Sindhuli
26	Hatpate RSDWP	Hatpate	Sindhuli
27	Tirtire RSDWP	Tirtire	Sindhuli
28	Bhulke RSDWP	Sakhar	Syangja
29	Padhrea RSDWP	Sakhar	Syangja
30	Tallo Padhera RSDWP	Myalpokhari	Gulmi
31	Kalimati RSDWP	Mityal	Palpa
32	Majhuwa RSDWP	Jhirubas	Palpa

H. List of New MSMEs Established (As per approved SAF)

SN	Districts	DPRC/BPRC Approved				REF Approved			
		Upgrading		New		Upgrading		New	
		MSMEs	Employment	MSMEs	Employment	MSMEs	Employment	MSMEs	Employment
1	Achham	2	9	10	20	1	2	10	20
2	Baglung	6	23	15	32	4	16	7	21
3	Baitadi	1	3	3	7	1	3	1	3
4	Bajhang	0	0	7	15	1	2	18	32
5	Bajura	1	1	18	39	0	0	16	34
6	Dhading	6	6	2	4	0	0	1	3
7	Dhankut	0	0	2	4	0	0	2	4
8	Dolakha	5	19	5	7	5	19	5	7
9	Doti	0	0	2	5	0	0	2	5
10	Gorakha	6	11	13	22	5	5	5	6
11	Gulmi	1	2	4	9	1	2	1	2
12	Ilam	5	11	5	16	5	11	5	16
13	Jajarkot	9	61	4	21	7	51	4	21
14	Jumla	1	2	4	17	1	2	4	17
15	Kaski	1	6	11	32	1	6	10	30

SN	Districts	DPRC/BPRC Approved				REF Approved			
		Upgrading		New		Upgrading		New	
		MSMEs	Employment	MSMEs	Employment	MSMEs	Employment	MSMEs	Employment
16	Kavrepa	14	26	7	9	14	26	7	9
17	Khotang	2	2	11	13	2	2	11	13
18	Lamjung	0	0	13	17	0	0	7	11
19	Myagdi	14	43	1	3	12	38	1	3
20	Nawalp	0	0	13	14	0	0	8	10
21	Okhaldh	14	21	6	13	13	19	5	11
22	Palpa	0	0	5	10	0	0	3	6
23	Panchth	3	13	16	44	3	13	12	33
24	Rolpa	0	0	11	12	0	0	11	12
25	Rukum	0	0	3	13	0	0	5	14
26	Sindhuli	0	0	10	16	0	0	1	2
27	Solukhu	6	10	2	3	5	10	3	3
28	Surkhet	3	16	14	46	3	16	14	46
29	Syangja	0	0	5	12	0	0	4	8
30	Taplejun	3	6	11	25	3	4	11	21
31	Terhath	0	0	4	4	5	16	5	7
32	Udayap	1	1	8	10	5	5	4	10
	Total	**130**	**292**	**262**	**565**	**97**	**268**	**203**	**440**

I. Employment increased by MSME types (As per approved SAF)

S.N.	Sectors		Number of Employment generated through		
		New MSME	Existing MSME	Enterprises	Total
1	As per DPRC/BPRC	565	292		857
2	As per CREF	471	246	36	753

7.3 Status of Biogas Credit fund:

SN	Type of Financial Institution	Active no. of MFIs	Loan Disbursement	Loan Recovery	Outstanding Loan	Non-Overdue Loan	Overdue					Overdue Portfolio (PAR)	Ratio (%)		MFIs Overdue Portfolio (No.)	% of defaulting partner MFIs
							0-3 Months	3-6 Months	6-12 Months	>12 Months	Total		PIA	PAR		
1	Agriculture Co-operatives	6	11,975,998	8,966,015	3,009,983	2,482,760	0	4,225	0	522,998	527,223	1,502,223	17.52	49.9	3	50
2	Development Banks	1	67,535,439	63,035,439	4,500,000	0	0	0	0	4,500,000	4,500,000	4,500,000	100	100	1	100
3	Financial NGOs	3	23,177,500	22,155,843	1,021,657	943,791	0	62,168	15,698	0	77,866	809,116	7.62	79.2	2	66.67
4	Milk Co-operatives	3	4,706,000	3,693,054	1,012,946	1,012,816	0	130	0	0	130	422,005	0.01	41.7	1	33.33
5	Multipurpose Co-operatives	25	51,108,471	44,413,265	6,695,206	6,001,004	0	37,558	75,000	581,644	694,202	712,952	10.37	10.7	5	20
6	Other Institutions	5	17,158,467	15,522,426	1,636,041	1,225,097	0	10,944	0	400,000	410,944	1,058,944	25.12	64.7	2	40
7	Saving & Credit Co-operatives	34	130,779,214	118,534,678	12,244,536	8,440,397	0	401,561	291,655	3,110,923	3,804,139	6,157,006	31.07	50.3	16	47.06
8	Womens Co-operatives	13	50,338,719	47,017,595	3,321,124	2,578,700	0	33,927	103,319	605,178	742,424	1,513,424	22.35	45.6	7	53.85
	Grand Total	**90**	**356,779,808**	**323,338,315**	**33,441,493**	**22,684,565**	**0**	**550,513**	**485,672**	**9,720,743**	**10,756,928**	**16,675,670**	**32.2**	**49.9**	**37**	**41.11**

7.4 Beneficiaries:

S.N.	Programs/activities	Benefited				Caste/Ethnicity/Religion (% population)				
		HH	Total Pop	Male	Female	Janjati	Dalit	Madhesi	Muslim	Others
1	Micro/Mini	42,875	209,230	49%	51%	31%	19%	0	0	50%
2	IWM	40,612	198,186	49%	51%	31%	2%	2%	0	65%
3	SSHS	88,408	442,040	51%	49%	NA				
4	SHS									
5	PVPS					55%	10%	0	0	35%
6	Solar Dryer			55%	45%	57%	0	0	0	43%
7	Biogas-Domestic	31,512	157,560	55 %	45%	22%	3%	8%	1%	66%
8	ICS- Metal	5060	25,300	47%	53%	NA	NA	NA	NA	NA
9	ICS- Mud	135811	626427	47%	53%	25%	12 %	35%	10%	18%
10	MSMEs	300	1500	77%	23%	48%	5%	0	0	47%
11	IGA	1013	4686	37%	63%	42%	31%	0	0	27%

Note: percentage of population under Caste/Ethnicity/Religion computed from two different sources like RSCs and technical subcomponents where the disintegrated database systems are recently established and yet to be validated.

7.5 Year wise Breakdown of NRREP Targets:

Technology	Unit	5 year target	Year 1	Year 2 Plan	Year 3	Year 4	Year 5
Mini/Micro Hydro Power	kW	25,000	3,000	4,500	5,500	6,000	6,000
Improved Water Mill	Nos.	4,000	1000	750	750	750	750
Solar PV Home Systems and Small	Nos.	600,000	90000	125,000	125,000	125,000	135,000
Institutional Solar PV Systems and	Nos.	1,550	65	325	325	385	450
Solar Dryer and cooker	Nos	7,500	0	500	1,500	2,000	3,500
Mud ICS	Nos.	440,000	100,000	100,000	75,000	75,000	90,000
Metallic ICS	Nos.	35,000	7,000	5,000	7,000	9,000	7,000
Domestic Biogas Plants	Nos.	130,000	19,000	30,000	50,000	19,000	15,000
Institutional/community/	Nos.	1,200	0	33	334	408	425
Productive energy use (New and	Nos	4,100	50	300	1,200	1,800	750
IGA	HH	15,300	0	1,000	6,000	6,000	2,300

7.6 Major Capacity Building Initiatives

Name of Training	Organizer (Component)	Duration (days)	Target Group	*People trained (No.)
Sensitization program on GESI	GESI unit	half day	AEPC/NRREP staff	22
Training on Right based approach and Right to information	GESI unit	half day	AEPC/NRREP staff	29
TOT to develop training package for user's committee	GESI unit	2 days	GESI/M&QA/ID officers	9
AEPC/NRREP overview and GESI sensitization to FION and FIDO members	GESI unit	2 days	FION district chaper representatives and FIDO professionals	52
TOT on GESI mainstreaming	GESI unit	5 days	Professionals from AEPC/NRREP, RSC, MOFALD/LGCDP & under secretary & section officer from MOEST	First 3 days-24 no. & last 2 days-12

Name of Training	Organizer (Component)	Duration (days)	Target Group	*People trained (No.)
				no.
11 RET sensitization events to indigenous nationalities from 11 various remote VDCs o 9 districts	GESI unit	11 days (one day for each event)	Community level participants-representatives from ward level active members from FION district chapter	772
Enterpreneurship/Skill/Business Management training	PEUC	54	Entrepreneurs/IGA owner	700
ToT/Orientation/Capacity Building training	PEUC	10	RSCs BPU staff/DPRC members	100
Micro Hydro Operators' Training	CE in collaboration with NMHDA	22	Operators of Micro Hydro Projects	100
Micro Hydro Project Management Training	CE in collaboration with UCS	7	Managers of Micro Hydro Projects	100
Pico Hydro Operation and Management Training	CE in collaboration with D.L.Energy and UCS	8	Operators of Pico hydro projects	50
Orientation training on Mini Hydro DFS	CE	4	CE team	12
Installers on SGBP	BSC	1	Installer	38
Awareness Training on SGBP	BSC	1	Owners of Installer Firms	10
Validation Workshop on Policy Gap of WtE	BSC	1	Stakeholders	40
Training on Biogas Design	BSC	3	Staff of BSC and national service providers	22
Training on Slury and general promotion (Event 20)	BSC and BSPN		INGO/GOsCBOs ets	698
Trainining on Third Party Monitoring	BSC and BSPN	3	AEPC Staff/Stakeholders NSps etc	22
New Mason Training (4 event)	BSC and NBPA	28	Biogas Construction Companies	120
New Supervisor Training (3 event)	BSC and NBPA	18	Biogas Construction Companies	90
Mason Supervisor Refresher (5 event)	BSC and NBPA	10	Biogas Construction Companies	149
Mason Refresher (1 event)	BSC and NBPA	2	Biogas Construction Companies	30
Supervisor Refresher (1 event)	BSC and NBPA	2	Biogas Construction Companies	31
Account Keeping and management Training to the BCs(4 Event)	BSC and NBPA	8	Biogas Construction Companies r	146

Name of Training	Organizer (Component)	Duration (days)	Target Group	*People trained (No.)
Regional Level Orientation to biogas companies on Business Portfolio Deevelopment	BSC and NBPA	5	Biogas Construction Companies r	30
Construction Training on Large Biogas Plants	BSC and BSP/N and CORD	9	Large Biogas Construction Companies	66
International Stove Design and Performance Testing Workshop (Training)	AEPC/Winrock International, USEPA and Aprovecho Research Center	1	AEPC, Winrock Nepal CRT, KU, RSCs BEEs and staffs of relevant stakeholders	40
Training of Trainers (ToT) on Improved Cooking Stove Dissemination to DC & LSM	BESC	10	DC & LSM of RSCs & DSCs	96
Training of Trainers (ToT) on Improved Cooking Stove Dissemination to LSM	BESC	10	LSM of RSCs only	106
Basic training on ICS technologies for business groups	BESC/RSC	52	Stove Masters	1300
Orientation cum training to field monitor of consultants of selected third party monitoring consultant	BESC	1	Field monitors of third party consultant	36
Training on biomass densification technology and establishment of demonstration unit.	BESC	1	Rural communities for entrepreneurship development	23
Total				

7.7 District-wise number of Biogas Digesters included in Biogas CPAs (CPA-2, CPA-3 and CPA-4)

District	CPA-2	CPA-3	CPA-4	Total	District	CPA-2	CPA-3	CPA-4	Total
Achham	4			**4**	Lamjung	537	582	620	**1,739**
Arghakhanchi	26	30	21	**77**	Mahottari	87	87	92	**266**
Baglung	46	62	52	**160**	Makwanpur	1,739	2,363	1,860	**5,962**

District	CPA-2	CPA-3	CPA-4	Total	District	CPA-2	CPA-3	CPA-4	Total
Baitadi	1			**1**	Morang	827	562	447	**1,836**
Bajhang	36	33	10	**79**	Mugu	2	2	4	**8**
Bajura	1			**1**	Mustang	4	1	2	**7**
Banke	489	361	412	**1,262**	Myagdi	36	85	67	**188**
Bara	382	356	310	**1,048**	Nawalparasi	614	649	477	**1,740**
Bardiya	510	599	804	**1,913**	Nuwakot	194	64	375	**633**
Bhaktapur	89	67	4	**160**	Okhaldhunga	2		18	**20**
Bhojpur	7	27	18	**52**	Palpa	380	392	402	**1,174**
Chitwan	1,042	935	844	**2,821**	Panchthar	64	78	33	**175**
Dadeldhura	1		1	**2**	Parbat	33	25	18	**76**
Dailekh	24	12		**36**	Parsa	62	25	51	**138**
Dang	801	751	1,230	**2,782**	Pyuthan	53	79	119	**251**
Darchula	11	21		**32**	Ramechhap	66	66	77	**209**
Dhading	720	876	852	**2,448**	Rasuwa	52	46	69	**167**
Dhankuta	53	78	25	**156**	Rautahat	164	124	123	**411**
Dhanusa	26	31	17	**74**	Rolpa		15	20	**35**
Dolakha	112	170	230	**512**	Rukum	4	10		**14**
Dolpa	4			**4**	Rupandehi	358	419	237	**1,014**
Doti	4	1	31	**36**	Salyan	24	28	28	**80**
Gorkha	434	376	410	**1,220**	Sankhuwasabha	32	42	27	**101**
Gulmi	87	61	55	**203**	Saptari	13	17	14	**44**
Humla	1		1	**2**	Sarlahi	308	309	299	**916**
Ilam	624	468	559	**1,651**	Sindhuli	584	502	527	**1,613**
Jajarkot			6	**6**	Sindhupalchowk	54	186	145	**385**
Jhapa	2,391	1,369	874	**4,634**	Siraha	34	66	31	**131**
Jumla	2	1	1	**4**	Solukhumbu	13	23	27	**63**
Kailali	1,011	1,080	1,571	**3,662**	Sunsari	240	157	133	**530**
Kalikot	25	11	8	**44**	Surkhet	216	185	234	**635**
Kanchanpur	776	746	808	**2,330**	Syangja	453	513	497	**1,463**
Kapilbastu	211	401	353	**965**	Tanahu	1,135	1,321	1,575	**4,031**

District	CPA-2	CPA-3	CPA-4	Total	District	CPA-2	CPA-3	CPA-4	Total
Kaski	769	899	773	**2,441**	Taplejung		3	16	**19**
Kathmandu	40	17	36	**93**	Tehrathum	31	51	45	**127**
Kavrepalanchowk	393	677	575	**1,645**	Udayapur	228	267	209	**704**
Khotang	6	7	20	**33**	**Grand Total**	**19,927**	**19,959**	**19,970**	**59,856**
Lalitpur	125	92	141	**358**					

7.8 List of Districts with on-going District Climate and Energy Plan Preparation

SN	District	Cluster
1.	Morang	Cluster-1
2.	Sunsari	
3.	Udayapur	
4.	Khotang	
5.	Solukhumbu	
6.	Dolakha	Cluster-2
7.	Ramechhap	
8.	Mahottari	
9.	Nuwakot	
10.	Chitwan	
11.	Myagdi	Cluster-3
12.	Lamjung	
13.	Nawalparasi	
14.	Tanahun	
15.	Gulmi	
16.	Jajarkot	Cluster-4
17.	Jumla	
18.	Dailekh	
19.	Dang	
20.	Bardiya	

SN	District	Cluster
21.	Pyuthan	
22.	Bajhang	Cluster-5
23.	Bajura	
24.	Achham	
25.	Kailali	

7.9 POV Summary for 2013-14

A. Summary table for POV

SN	Descriptions	No of Projects	Proposed		Verified		Remarks
			kW	HH	kW	HH	
1	Total no of projects for POV	89	2157.2	18944			
2	No of projects to be done POV	62	1557.13	15698	1475.84	15467	
	2.1 No of project forwarded to CREF	49	1175.00	11766	1216.46	11639	One from previous year
	2.2 no. of Projects failed in POV	13	382.13	3932	259.38	3828	
3	POV Remaining Projects	27	600.00	3246			
4	No of POV Team mobilized	13					

B. List of projects forwarded to CREF

SN	Projects Name	District	As per DFS		RSC/Support Institutions	MQA Unit				Mfr./Installer Company
			kW	*HH*		*Date of Report from POVI*	*Date of POV*	*Verified Power (kW)*	*Verified HH*	
1	Bhuji Khola V MHP	Baglung	84	676	DCRDC	7 Feb 2014'	8-jan-2014'	88.16	785	Radha Structure
2	DhorpatanGarpa Khola MHP	Baglung	40	436	DCRDC	7 Feb 2014'	10th-Jan-2014'	40.28	354	North

SN	Projects Name	District	As per DFS		RSC/Support Institutions	MQA Unit				Mfr./Installer Company
			kW	*HH*		*Date of Report from POVI*	*Date of POV*	*Verified Power (kW)*	*Verified HH*	
3	Ingle Khola MHP	Myagdi	30	260	DCRDC	7 Feb 2014'	4th-Jan-2014'	29.62	258	OPS
4	Barahaghos Khola MHP	Baglung	11	119	DCRDC	7 Feb 2014'	15th-Jan-2014'	14.19	128	SHE
5	Baya Khola MHP	Baglung	50	511	DCRDC	7 Feb 2014'	8th-Jan-2014'	54.95	514	OPS
6	Sakti Khola Mahabharat PHP	Kavreplanchowk	5	68	REMREC	6-Mar-2014'	10 jan 2014'	5.01	68	HMC
7	Nagaraghatte MHP	Dolakha	40	385	REMREC	6-Mar-2014'	14 Jan 2014'	38.12	530	Housing
8	Milti Khola II MHP	Dolakha	37	372	REMREC	6-Mar-2014'	17 jan 2014'	40.48	323	Lumbini engg
9	Dumja Khola MHP	Remechhap	18	153	REMREC	6-Mar-2014'	21 Jan 2014'	17.17	161	Lumbini engg
10	Yolung Khola MHP	Okhaldhunga	10	108	REMREC	6-Mar-2014'	26 Jan 2014'	10.16	92	CRC NEPAL
11	Khani Khola MHP	Kavreplanchowk	20	177	REMREC	2-Feb-2014'	25 Jan 2014'	19.07	178	AG Power
12	Rancha Khola MHP	Kavreplanchowk	6	78	REMREC	2-Feb-2014'	22 Jan 2014'	6.17	78	Techno Village
13	Khahare Khola MHP	Nawalparasi	7	101	RESDTN	9-feb-2014	23-Dec-2013'	7.45	99	RES
14	Daringal Khola MHP	Dhading	10	90	RESDTN	9-feb-2014	26-Dec-2013'	12.19	91	CRC
15	Saghuri Khola PHP	Nawalparasi	3	45	RESDTN	9-feb-2014	17-Dec-2013'	3.39	47	DLE

SN	Projects Name	District	As per DFS		RSC/Support Institutions	MQA Unit				Mfr./Installer Company
			kW	*HH*		*Date of Report from POVI*	*Date of POV*	*Verified Power (kW)*	*Verified HH*	
16	Lower Kri Khola	Lamjung	6	65	RESDTN	6-Mar-2015	28 Dec 2013'	9.12	57	Hydro Energy
17	Paise Khola MHP	Lamjung	10	95	RESDTN	6-Mar-2016	23 dec 2013'	10.01	95	RES, Tanahun
18	Tawa I Khola MHP	Khotang	17	248	SCDC	28-Feb-2014'	20 dec 2013'	18.21	245	North
19	Liding Khola MHP	Khotang	90	785	SCDC	28-Feb-2014'	7 Jan 2014'	86.5	788	AGP
20	Nakham Khola MHP	Khotang	60	565	SCDC	28-Feb-2014'	25 Dec 2013'	60.6	526	CRCN
21	Nokati Tap Khola MHP	Khotang	40	340	SCDC	28-Feb-2014'	28 Dec 2013'	40.35	325	North
22	Swarna Tap Khola MHP	Khotang	30	255	SCDC	28-Feb-2014'	3 Jan 2014'	35.24	246	North
23	PanchamiChhamawa Khola MHP	Khotang	39	327	SCDC	28-Feb-2014'	30-Dec-2013'	40.5	322	North
24	Langhali PHP	Ilam	3	30	NCDC	26-March-2014'	19 Feb 2014'	3.34	35	Tej Energy So.
25	Khogi Khola PHP	Ilam	4	32	NCDC	26-March-2014'	15 feb 2014'	4.72	39	Singhabahini
26	Fewa Khola Sanghim PHP	Ilam	2	18	NCDC	26-March-2014'	17 Feb 2014'	2.09	18	Singhabahini
27	Ithung Khola II PHP	Panchthar	5	50	NCDC	26-March-2014'	21-Feb-2014'	6.12	55	Gautam
28	Nankohang Khola	Gorkha	26	265	RESDTN	10 March 2014'	11-mar-2014'	24.91	273	Multiservice Link

SN	Projects Name	District	As per DFS		RSC/Support Institutions	MQA Unit				Mfr./Installer Company
			kW	*HH*		*Date of Report from POVI*	*Date of POV*	*Verified Power (kW)*	*Verified HH*	
29	Tamsyo Khola	Gorkha	12	105	RESDTN	10 March 2014'	13-Mar-2014'	12.53	106	DLE
30	Palpeque Khola MHP	Gorkha	7	120	RESDTN	10 March 2014'	15-Mar-204'	7.92	107	CRC
31	Hagardi Khola MHP	Dhading	16	140	RESDTN	10 March 2014'	18-mar-2014'	16.61	138	CRC
32	Darna MHP	Achham	83	915	RDSC	10-April-2014'	7-march-2014'	80.64	916	Siemens Hydro Engg
33	Nani Khola MHP	Achham	32	360	RDSC	10-April-2014'	10-march-2014'	44.08	379	Appropriate Engg
34	Ghatte Khola MHP	Bajura	8	102	RDSC	10-April-2014'	14-march-2014'	7.33	134	Technical Engg Design
35	Simdhara MHP	Bajura	40	377	RDSC	10-April-2014'	17-march-2014'	38.51	314	NMASS
36	Thali gad MHP	Darchula	30	488	RDSC	10-April-2014'	24th-march-2014'	28.87	370	Oshin Power
37	Jinakhukhola MHP	Sindhuli	14	161	REWSSPC	10-April-2014'	23-march-2014'	17.54	183	Thapa Engg
38	Rancha Khola Ganeshthan MHP	Sindhuli	10	94	REWSSPC	10-April-2014'	27-march-2014'	9.92	90	Motherland
39	Chuni Khola MHP	Kavre	1.5	20	REMREC	22-Feb-2014'	19-Jan-2014'	1.57	20	AG Power Company
40	Ghatte Khola MHP	Dolpa	30	267	BASE	1 -June-2014'	13-April-2014'	28.53	299	Great Nepal
41	Dokhlabang Khola MHP	Rukum	17	141	BASE	1 -June-2014'	20-April-2014'	16.38	128	Oshin Power

SN	Projects Name	District	As per DFS		RSC/Support Institutions	MQA Unit				Mfr./Installer Company
			kW	*HH*		*Date of Report from POVI*	*Date of POV*	*Verified Power (kW)*	*Verified HH*	
42	Bhaise Khola MHP	Rukum	25	261	BASE	1 -June-2014'	23-April-2014'	26	258	Oshin Power
43	Lalbang Sipcha Khola MHP	Rukum	7	115	BASE	1 -June-2014'	27 -April-2014'	9.59	114	A.G. Power
44	Molung Khola III MHP	Okhaldhunga	20	210	REMREC	1 -June-2014'	18-May-2014'	20.06	215	Hydro Energy Concern
45	Ghatte Khola MHP	Solukhumbu	10	120	REMREC	1 -June-2014'	23-May-2014'	12.9	107	Hydro Energy Concern
46	Peda Khola PHP	Jajarkot	4.5	65	ASTHA	18-May-2014'	14-April-2014'	5.46	75	K.P BabasayaSurvi
47	Talkoti Gad MHP	Bajhang	62	627	RDSC	7-July-2013'	25-April-2013'	62.74	512	Oshin Power Services
48	Lebang Khola MHP	Baglung	29	270	DCRDC	7 Feb 2014'	20-Jan-2014'	28.33	286	TEI
49	Pipe Khola MHP	Jajarkot	14	154	ASTHA	18-May-2014'	17-April-2014'	12.83	158	North Eng.
	Grand total		**1175**	**11766**	**49**	**49**	**49**	**1216.46**	**11639**	

C. List of deviated projects from PoV

SN	*Projects Name*	*District*	As per DFS		*RSC/Support Institutions*	MQA Unit				*Mfr./Installer Company*	*Remarks*
			kW	*HH*		*Date of Report from*	*Date of POV*	*Verified Power*	*Verified HH*		
1	Bans Khola MHP	Baglung	18	204	DCRDC	7 Feb 2014'	21-Jan-2014'	15.77	205	DCEM	**Re-pov**

SN	Projects Name	District	As per DFS		RSC/Support Institutions	MQA Unit				Mfr./Installer Company	Remarks
			kW	HH		Date of Report from	Date of POV	Verified Power	Verified HH		
2	Putpute Khola II MHP	Syangja	98	877	DCRDC	7 Feb 2014'	24-Jan-2014'	74.09	832	NMASS	**Re-pov**
3	Sarangi Khola	Lamjung	4	45	RESDTN	6-Mar-2017	25-Dec-2013'	2.22	48	Power Tech Nepal	
4	Fulmadi Khola II PHP	Nawalparasi	5	96	RESDTN	9-feb-2014	21-Dec-2014'	3.84	96	RES	
5	Bhumke Khola PHP	Rukum	4	56	BASE	1 -June-2014'	29-April-2014'	3.38	65	Oshin Power	
6	Okhreni Khola MHP	Baglung	8	82	DCRDC	7 Feb 2014'	12-Jan-2014'	6.52	90	SHE	
7	Nirandi Khola-I MHP	Nawalparasi	11	138	RESDTN	9-feb-2014	20-Dec-2013'	9.61	130	DLE	
8	Sangtarisang MHP	Jajarkot	98.13	1028	ASTHA	18-May-2014'	12-April-2014'	52.69	1049	NMASS	
5	Barahathan Khola MHP	Baglung	8	74	DCRDC	7 Feb 2014'	16-Jan-2014'	5.02	78	SHE	
8	Chilli Khola II	Lamjung	10	104	RESDTN	6-Mar-2014	20-Dec-2013'	3.74	119	Hydro Energy	
9	Laxmi Khola MHP	Dhankuta	40	363	NCDC	26-March-2014'	11-Feb-2014'	34.06	370	NMASS	
10	Gokulegad MHP	Darchula	47	555	RDSC	10-April-2014'	21-march-2014'	28.10	469	Oshin Power Service	
13	Sirpa khola MHP.	Jajarkot	31	310	ASTHA	18-May-2014'	20-April-2014'	20.34	277	Thapa Engg	
	Grand total		**382.13**	**3932**	**13**	**13**		**259.38**	**3828**		

7.10 Summary of Random Monitoring Results

A. Solar home systems *(total monitored nos: 365)*

Sn.	Description of finding/deviation	No. of systems	No. of systems in %
1	systems never installed	11	3%
2	households said to have the system not found in said location	11	3%
3	systems not working at all	13	3.6%
4	systems without engrave number on panel and battery	17	4.7%
5	systems without engrave number on panel only	46	12.6%
6	systems without engrave number on battery only	28	7.7%
7	defective charge controller	6	1.6%
8	no charge controller	4	1.1%
9	defective battery	10	2.7%
10	size of the system different from the one in AEPC database	1	0.3%
11	systems do not exist (once installed but sold later)	5	1.4%
12	owners migrated taking the system	2	0.5%

B. Pico/micro hydro schemes *(total monitored nos: 86)*

Sn.	Description of finding/deviation	No. of projects	No. of projects in %
1	Not functioning at all	9	10.5%
2	Functioning poorly	6	7.0%
3	Canal damaged by landslide	1	1.2%
4	Plant completely swept away by flood	1	1.2%

C. Improved cook stoves *(total monitored nos: 234)*

Sn.	Description of finding/deviation	No. of ICS	No. of ICS in %
1	ICS never installed	32	13.7%
2	ICS not operational	6	2.6%
3	households said to have the ICS not found in said location	9	3.8%
4	ISC was there but doesn't exist now	4	1.7%
5	Equipment partly supplied but the ICS (metallic) not installed.	1	0.4%
6	ICS abandoned as the owner has built new house	5	2.1%

D. Household biogas plants *(total monitored nos: 110)*

Sn.	Description of finding/deviation	No. of plants deviated	%
1	Plants found uncompleted, but reported to be completed and subsidy paid	3	2.7%
2	Plant not working at all	2	1.8%
3	Plant not in use (switched to LPG)	2	1.8%

7.11 RE Source:

A. Updates of CDS projects that has been already awarded to CDS suppliers

S.No.	CDS Projects already contracted	Demanders	Suppliers	Status
1	Training on Biomass Briquetting Business Development and Technologies	Belchauri Community Agriculture Co-operative Society Ltd.	Centre for Energy & Environment, Nepal	Completed
2	Building Capacity of District-level Project Review Committee (DPRC)	NCDC & DCRDC	Epsom Engineering Consultancy	Completed
3	Developing and printing construction and installation manual for micro hydropower project installer	NMHDA	Universal Consultancy Services Pvt. Ltd.	On going
4	Developing Training Manual for Solar PV Pumping System and Providing Training	EEO & PO of DDC	GRID, Nepal & CES Joint Venture	On going
5	Developing a Guideline to Prepare Marketing Plan for Biogas Companies and provide Training	NBPA-Pokhara Regional Office	Clean & Green Nepal and BSP-Nepal Joint Venture	On going
6	Develop Operational Profile for Micro Hydropower Installer (Civil) level 2 and Micro Hydropower Installer (Electro-mechanical) level 2.	NMHDA	CTEVT,NSTB	On going

B. Other projects which are on process

S.No.	CDS Project	Status
7	Conducting Project Management cum Report Writing Training of Micro Hydropower Projects to Managers of Installation	On going
8	Conducting Project Management Training of Micro Hydropower Projects to Chair Persons & Secretaries of User Committee	On going
9	Enhancing capacity of repair and maintenance centres for solar PV systems at sub-national level	Call for proposal was made two times but service providers did not comply with government procurement rule. Therefore call was cancelled. Now it is again in the process of call for proposal.
10	Promotion of ICS for forest conservation and sustainable livelihood through Agriculture Cooperative.	Agreed to prepare a credit guideline for all RETs including ICS that will be basis for cooperative to provide credit financing to RETs. Central Renewable Energy Fund (CREF) has shown interest to co-finance project. ToR has been finalized which was jointly prepared by RE-Source and CREF.
11	CTEVT/NSTB Skill Test For MHP Installer Level 3	National Skill Testing Board (NSTB) which is authorized body in Nepal to develop operational profile mentioned that they will prepare operational profile for MHP Installer Level 3 only after MHP Installer Level 2 is in place. Therefore, planned for this year after completion of Level 2.
12	Capacity Building of Micro hydro User's Group to promote ICS in 8 VDC's of Dhading districts	Biomass Energy Support Programme (BESP) and LBCOMSC wants to pilot in whole Dhading district with private sector driven model led by DDC. Therefore, working on concept with BESP and LBCOMSC.
13	Management Training for Project Sustainability of Bajhang District	RE-Source team is working on identifying the real need of CDS demanders and CDS demanders are not clear on what they want.

S.No.	CDS Project	Status
14	Strengthening Promoters' Association by Capacity Building (DOTI)	

7.12 Overview of Output wise Budget and Expenditure:

Components	Sub components/units	OUTPUTS	Budget	Expenses	%
CREF Component	-	Output 1.1	5,518,000	1,521,085.01	27.57%
		Output 1.2	122,954,000	4,639,454.84	3.77%
		Output 1.3	2,308,975,000	1,933,761,454.79	83.75%
		Sub-total	**2,437,447,000**	**1,939,921,994.64**	**79.59%**
Technical support component	Biogas	Output 2.1	34,700,000	15,297,395.10	44.08%
		Output 2.2	15,300,000	17,708,929.42	115.74%
	Biomass	Output 2.3*	163,210,000	138,111,455.45	84.62%
		Output 2.4	6,290,000	3,881,568.40	61.71%
	Climate & Carbon	Output 2.5	18,000,000	13,217,753.32	73.43%
	Solar	Output 2.6	54,500,000	37,045,274.16	67.97%
		Output 2.7	2,000,000	119,810.00	5.99%
		Output 2.8	25,150,000	14,203,277.00	56.47%
		Output 2.9	8,350,000	4,466,552.01	53.49%
	Community Electrification	Output 2.10	34,810,000	36,641,090.50	105.26%
		Output 2.11	25,950,000	19,656,694.80	75.75%
		Output 2.12	52,040,000	29,133,481.83	55.98%
		Output 2.13	7,200,000	6,195,207.68	86.04%
	Institutional Development, GESI and MQA	Output 2.14	45,190,000	19,072,562.19	42.21%
	Outreach	Output 2.15	60,607,000	64,349,996.12	106.18%
		Output 2.16	14,203,000	7,849,181.16	55.26%

Components	Sub components/units	OUTPUTS	Budget	Expenses	%
	PEU-IGA	Output 2.17	11,873,000	7,637,661.12	64.33%
		Sub-total	**579,373,000**	**434,587,890.26**	**75.01%**
Business Development & RE and PEU	PEU- MSMES	Output 3.1	13,300,000	10,254,540.90	77.10%
		Output 3.2	16,570,000	11,523,738.97	69.55%
		Output 3.3	11,300,000	8,721,610.25	77.18%
	Technical assistance	-	11,957,000	9,547,800.71	79.85%
		Sub-total	**53,127,000**	**40,047,690.83**	75.38%
NRREP management			*154,197,000*	*96,403,341.14*	*62.52%*
Studies, Audit , review			*7,000,000*	*3,603,248.84*	*51.47%*
		Annual Total	***3,231,144,000***	***2,514,564,165.71***	***77.82%***

*Out of the total budget 163,210,000 mentioned under the out put 2.3, an amount of NRs 23,500,000 belongs to TA provider to spent by them directly.

7.13 Overview of Budget and Expenses:

a) Component wise :

SN	Component/Unit	Programme Budget	%	Year 1 (2012/13)			Year 2 (2013/14)			Project to date	
				Budget	Expenses	(%)	Budget	Expenses	(%)	Expenses	(%)
1	**CREF**	**9,923,394,000**		**1,884,120,000**	**431,306,039**	**23%**	**2,437,449,000**	**1,939,921,995**	**79.59%**	**2,371,228,034**	**24%**
	Danida	965,140,000	10%	405,820,000	94,571,740	23%	467,859,000	426,809,915	91.23%	521,381,655	54%
	Norway	868,626,000	9%	405,820,000	94,571,740	23%	467,859,000	426,809,915	91.23%	521,381,655	60%
	DFID	666,824,000	7%	268,000,000	63,665,968	24%	232,000,000	197,597,154	85.17%	261,263,121	39%
	KFW	193,028,000	2%	24,000,000	-	0%	203,700,000	-	0.00%	-	0%
	SREP	1,754,800,000	18%				23,200,000	-	0.00%	-	0%
	GIZ	-	0%	55,000,000	-	0%	42,700,000	-	0.00%	-	
	UNDP/UNCDF		0%	9,280,000	8,356,420	90%	34,362,000	3,774,742	10.99%	12,131,162	
	GoN	5,474,976,000	55%	716,200,000	170,140,172	24%	965,769,000	884,930,269	91.63%	1,055,070,441	19%
2	**Technical**	**3,518,374,000**		**309,230,680**	**164,183,977**	**53%**	**567,498,000**	**426,950,229**	**75.23%**	**591,134,206**	**17%**

SN	Component/Unit	Programme Budget	%	Year 1 (2012/13)			Year 2 (2013/14)			Project to date	
				Budget	Expenses	(%)	Budget	Expenses	(%)	Expenses	(%)
	Support										
	Danida	1,447,710,000	41%	155,125,840	86,190,579	56%	258,489,000	194,346,439	75.19%	280,537,018	19%
	Norway	772,112,000	22%	140,104,840	77,993,397	56%	249,949,000	189,610,702	75.86%	267,604,099	35%
	WB		0%				10,440,000		0.00%	-	
	KFW	87,740,000	2%	10,000,000	-	0%				-	0%
	SNV (TA)	991,462,000	28%	4,000,000	-	0%	33,500,000	27,371,379	81.71%	27,371,379	4%
	GIZ (TA)						9,020,000	9,422,000	104.46%	9,422,000	
	UNDP (TA)						6,100,000	6,199,710	101.63%	6,199,710	
	GoN	219,350,000	6%							-	0%
3	**BDRE and Productive Energy Use**	**737,016,000**		**29,998,100**	**9,813,525**	**33%**	**65,000,000**	**47,685,352**		**57,498,877**	**8%**
	Danida	368,508,000	50%	14,999,050	4,906,762	33%	32,500,000	23,842,676	73.36%	28,749,438	8%
	Norway	368,508,000	50%	14,999,050	4,906,762	33%	32,500,000	23,842,676	73.36%	28,749,438	8%
4	**NRREP Management**	**447,474,000**		**108,926,500**	**67,290,914**	**62%**	**154,197,000**	**96,403,341**	**62.52%**	**163,694,255**	**37%**
	Danida	149,158,000	33%	40,116,250	19,942,719	50%	57,198,150	36,156,810	63.21%	56,099,529	38%
	Norway	87,740,000	20%	40,116,250	19,942,719	50%	32,964,850	20,837,113	63.21%	40,779,832	46%
	UNCDF		0%	950,000	-	0%	3,042,000		0.00%	-	
	GoN	210,576,000	47%	27,744,000	27,405,475	99%	60,992,000	39,409,418	64.61%	66,814,893	32%
5	**Studies, Audits & Reviews.**	**298,316,000**		**-**	-		**7,000,000**	**3,603,249**	**51.47%**	**3,603,249**	**1%**
	Danida	114,062,000	38%				4,410,000	2,270,047	51.47%	2,270,047	2%
	Norway	70,192,000	24%				2,590,000	1,333,202	51.47%	1,333,202	2%
	TA povider	114,062,000	38%							-	
	TOTAL	**14,924,574,000**	**-**	**2,332,275,280**	**672,594,455**	**29%**	**3,231,144,000**	**2,514,564,166**	**77.82%**	**3,187,158,620**	**21%**

b) Donor wise Summary:

SN	Source of fund	Programme Budget (Jul 2012 - July 2017)		Commitment as per AWP 13/14		Fund Released by Dev Partners / Other Income					Actual Expenses / Utilization				Fund balance Nrs
		%	Nrs	%	Nrs	Project to Date (2012-2017)	Fund Balance of previous year 12/13	2013/14	In relation with		Project to Date (2012-2017)	YTD (2013/14)	In relation with		
									Program e Budget	Annual Budget			Program Budget	Annual Budget	
			a	b	c	d	e	f	g=d/a	h=(e+f)/c	j=y1+y2	i	k=j/a	l=i/c	m= (e+f)-i
1	**DP**	**60%**	**8,954,744,400**	**68.22%**	**2,204,383,000**	**2,666,582,554.42**	**1,182,727,931.71**	**981,462,038.70**	**30%**	**98%**	**2,065,273,286.32**	**1,590,224,478.79**	**23%**	**77.82%**	**573,965,491.62**
a1	DANIDA	20%	2,984,914,800	25.4%	820,456,000	1,309,816,400.67	218,031,963.19	886,172,636.74	44%	135%	889,037,687.30	683,425,887	29.78%	83.30%	420,778,713.37
a2	NORWAY	14%	2,089,440,360	24.3%	785,863,000	963,833,435.38	766,418,816.33	-	46%	98%	859,848,226.60	662,433,608	41.15%	84.29%	103,985,208.78
a3	KfW	2%	298,491,480	6.3%	203,700,000	-	-		0%	0%	-	-	0.00%	0.00%	-
a4	DFID	4%	596,982,960	7.2%	232,000,000	261,263,121.41	197,597,153.68		44%	85%	261,263,121.41	197,597,154	43.76%	85.17%	-
a5	WB	12%	1,790,948,880	1.0%	33,640,000	-			0%	0%		-	0.00%	0.00%	-
a6	ADB			0.0%		-				#DIV/0!		-			-
a7	GIZ	4%	596,982,960	1.6%	51,720,000	9,422,000.00		9,422,000.00	2%	18%	9,422,000.00	9,422,000	1.58%	18.22%	-
a8	SNV *	1%	149,245,740	1.0%	33,500,000	89,903,924.31	679,998.52	61,880,149.31	60%	187%	27,371,379.00	27,371,379	18.34%	81.71%	35,188,768.83
a9	UNDP	3%	447,737,220	0.2%	6,100,000	6,199,710.00		6,199,710.00	7%	102%	6,199,710.00	6,199,710	4.09%	101.63%	-
a10	UNDP/UNCDF			1.2%	37,404,000	26,143,962.65		17,787,542.65		48%	12,131,162.00	3,774,742		10.09%	14,012,800.65
2	**GoN**	**40%**	**5,969,829,600**	**31.78%**	**1,026,761,000**	**1,560,357,621**	**367,587,723**	995,224,250.56	**26%**	**133%**	**1,121,885,333.93**	**924,339,687**	**19%**	**90.02%**	**438,472,286.63**
	Total (1+2)	**100%**	**14,924,574,000**	**100%**	**3,231,144,000**	**4,226,940,175**	**1,550,315,655**	**1,976,686,289.26**	**28.32%**	**109%**	**3,187,158,620.25**	**2,514,564,165.71**	**21.36%**	**77.82%**	**1,012,437,778**
a11	Other income**					79,081,518	61,706,158	17,375,360							**79,081,517.79**
Total (1+2+3)		**100%**	**14,924,574,000**	**100%**	**3,231,144,000**	**4,306,021,693**	**1,612,021,813**	**1,994,061,648.86**	**28.32%**	**109%**	**3,187,158,620.25**	**2,514,564,165.71**	**21.36%**	**77.82%**	**1,091,519,296.04**

7.14 TA contribution in the reporting year:

SNV's

PHYSICAL PROGRESS

A) QUANTITATIVE:

SN	NRREP Outputs	Planned Activities	Unit	Quantity/ Targets	Annual Progress					Remarks
					T1	T2	T3	Total	%	
1	Output 2.3: Scaled-up implement ation network for ICS is in place and tested and certified stoves with defined quality criteria are operational .	Analyse the persisting barriers to scaling up deployment of ICS	No. of analyses	1/Regular activity	1	0	0	1	100%	
2		Develop and update orientation and training modules for ICS promotion, including on constraints and needs of women and disadvantaged groups	No. of modules	1/Regular activity	0	0	0	0	NA	Modules developed in previous year was used with some update
3		Training of trainers	No. of trainees	0	0	0	0	0	NA	
4		Training of promoters and stove makers, including follow up	No. of trainees	330	45	177	201	423	128%	Other development partners also supported for the trainings
5		Training of monitoring personnel for ICS	No. of trainees	5	0	0	6	6	120%	Monitoring staffs were trained for smart phone based monitoring
6		Specification of laboratory and field tests	No. of specs.	1	1	0	0	1	100%	RETS conducted field test using PEMS
7		Provide training and capacity development support to designated laboratories/Institutions	No. of programs	1	1	0	0	1	100%	Provided training to RETS before field testing
8		Set up testing equipment (laboratory and field)	Set of testing equipment	NA	0	0	0	0	NA	RETS as 3rd party conducts field tests.
9		Test and document per stove type	No. of test reports	5	1	1	3	5	100%	
10		Carry out stratified sampling and field testing	No. of samples	2	2	0	0	2	100%	RETS conducted 2 sets of WBT using PEMS
11		Establish quality criteria	Set of criteria	1/Regular activity	0	0	0	0	NA	Criteria developed in previous year, regularly updated
12		Introduce quality assurance and verification procedures.	Set of procedures	1/Regular activity	0	0	0	0	NA	Guideline developed in previous year, regularly updated

SN	NRREP Outputs	Planned Activities	Unit	Quantity/ Targets	Annual Progress					Remarks
					T1	T2	T3	Total	%	
13		Private sector development and supply chain strengthening	No. of firms qualified	1	0	1	0	1	100%	
14		Development of ICS Database & IMS	No. of system	1	1	0	0	1	100%	Full-fledged database in MS Navision platform isoperating
15		Direct support for installation of ICS	No. of households	24,000	5,003	9,777	7,028	21,808	91%	
16		Development of knowledge products and dissemination	No. of products	1/Regular activity	0	0	1	1	100%	A video documentary is prepared and uploaded in YouTube.
1	*Output 2.5: CDM and other carbon market instruments are functional and generate revenue.*	Update knowledge of evolving rules and regulations in different carbon markets	No. of events	1/Regular activity	0	0	1	1	100%	Carbon FinanceAdvisor taking care of it.
2		Develop a well-diversified portfolio of projects using different instruments	No. of projects/ programs	1	0	1	0	1	100%	ICF registered as a CDM PoA
3		Put in place quality and performance assurance systems and monitor continuously	No. of systems	1/Regular activity	0	0	0	0	NA	Guideline developed in previous year, regular update and in use
4		Support external monitoring and verification in an effective manner.	No. of support	3	3	0	0	3	100%	Joint monitoring with district level line agencies
5		Explore carbon buyers and close carbon trade deals	No. of deals	1	0	1	0	1	100%	Contracted with Enecofor MS GS VER project

B) QUALITATIVE:

SN	NRREP Outputs	Planned Activities	Areas of contribution			Remarks
			T1	T2	T3	
1	Output 2.3: Scaled-up implementation network for	Analyse the persisting barriers to scaling up deployment of ICS	Find out the way so that existing trend on ICS installation be improved involving private sector with			Continuous follow up and improvements throughout the whole year.

SN	NRREP Outputs	Planned Activities	Areas of contribution			Remarks
			T1	T2	T3	
2	ICS is in place and tested and certified stoves with defined quality criteria are operational .	Develop and update orientation and training modules for ICS promotion, including on constraints and needs of women and disadvantaged groups	Orientation and sensitization to potential users for information dissemination and encouragement for		.	Regular and important activity of the program. Perfect time and location were assessed and planning for methods and reporting.
3		Training of trainers				Follow up to the process and methodology
4		Training of promoters and stove makers, including follow up				This activity is continuous. Planning and revisions were made as per the
5		Training of monitoring personnel for ICS			Preparation of manpower through training for ODK training maintaining	The personnel for monitoring were trained in previous year and they are updating self for general
6		Specification of laboratory and field tests	Field testing by RETS and reporting.			Rating of stove models were completed based on
7		Provide training and capacity development support to designated laboratories/Institutions	Capacity development of stove testers and preparation for field testing and reporting involving 3rd party.			
8		Set up testing equipment (laboratory and field)				No direct hardware support from SNV
9		Test and document per stove type	Test of rocket stoves designed by ICF and reporting following ISO IWA standard			Regular testing and reporting of new models developed as per the technological road map,
10		Carry out stratified sampling and field testing		Field testing for CDM monitoring. Simple WBT for efficiency in combination with performance testing using PEMS.		
11		Establish quality criteria				Following ISO IWA.

SN	NRREP Outputs	Planned Activities	Areas of contribution			Remarks
			T1	T2	T3	
12		Introduce quality assurance and verification procedures.		Follow up and improvement of the guidelines and mechanism.		Regularly conducted following guidelines and mechanism.
13		Private sector development and supply chain strengthening		Improve the current model of ICS promotion, inviting active participation from private sectors and local vendors		Concept note prepared and taken as one major activity for this year. Probably distributor may be inserted in the value chain.
14		Development of ICS Database & IMS			Development of Database and MIS and regular reporting to the AEPC/NRREP	Recording keeping in electronic form using software developed for ICF.
15		Direct support for installation of ICS	Carbon rebate to ICS users.	Carbon rebate to ICS users.	Carbon rebate to ICS users.	
16		Development of knowledge products and dissemination			Preparation of a video and sharing through YouTube	Information dissemination for peoples and other development partners.
1	*Output 2.5: CDM and other carbon market instruments are functional and generate revenue.*	Update knowledge of evolving rules and regulations in different carbon markets				On-going
2		Develop a well-diversified portfolio of projects using different instruments			CDM PoA registration completed. Micro Scale Gold Std. VER project preparation started.	
3		Put in place quality and performance assurance systems and monitor continuously			Updating the QA&MS for CDM monitoring of installed ICS.	
4		Support external monitoring and verification in an effective manner.			Preparation of external monitoring and verification for CDM	
5		Explore carbon buyers and close carbon trade deals		Exploring and closing carbon deal with Eneco for MS GS VER project.		

FINANCIAL PROGRESS:

SN	Budget Heads	Contributed Amount (NRS. 000')				Remarks
		T1	T2	T3	Total	

1	Total budget including SNV Nepal and Head Office overheads for the ICS Program with Carbon Finance (ICF)	11,363,675	16,206,509	16,616,349	44,186,533	
	Total	11,363,675	16,206,509	16,616,349	44,186,533	

GIZ NEEP

Physical Progress:

A) QUANTITATIVE:

SN	NRREP Outputs	Planned Activities	Unit	Quantity/ Targets	Cumulative Progress				Remarks
					1st year	2nd year	Total	%	
1		Draft Biomass Energy Strategy (BEST)	No.	1	½	½	1	100	Draft only
2		ICS field testing (stoves)	No.	80	-	80	80	100	NEEP and STPP coop
3		IICS field testing (stoves)	No.	22	-	22	22	100	NEEP and STPP coop
4		Stove Master Training	Pers	100	-	102	102	100	Via SFF with FECOFUN
5		Mud ICS (stoves)	No.		-	1500	1500		Via FECOFUN, already in NRREP system, do not double count!
6		PEMS for RETS		1		1	1	100	

B) QUALITATIVE:

SN	NRREP Outputs	Planned Activities	Areas of contribution		Remarks
			Year-1	Year- 2	
		Awareness for ICS/IICS		Workshops and test cooking	Via STPP and FECOFUN
		Training of Stove Masters		Capacity Building on ICS and IICs	Via FECOFUN
		Training on PEMS Equipm.		Capacity Building and ICS Testing	

Financial Progress:

A) CUMULATIVE:

SN	Budget Heads	Committed Budget (NRS. 000')	Contributed Amount (NRS. 000')				Remarks
			1st year	2nd year	Total	%	
1			300 Lakh	325 Lakh	625 Lakh		NEEP comp 2, TA+ in kind
2			80 Lakh	122 Lakh	203 Lakh		Biomass Energy Strategy (BEST)
	Total		380 Lakh	447 Lakh	828 Lakh		