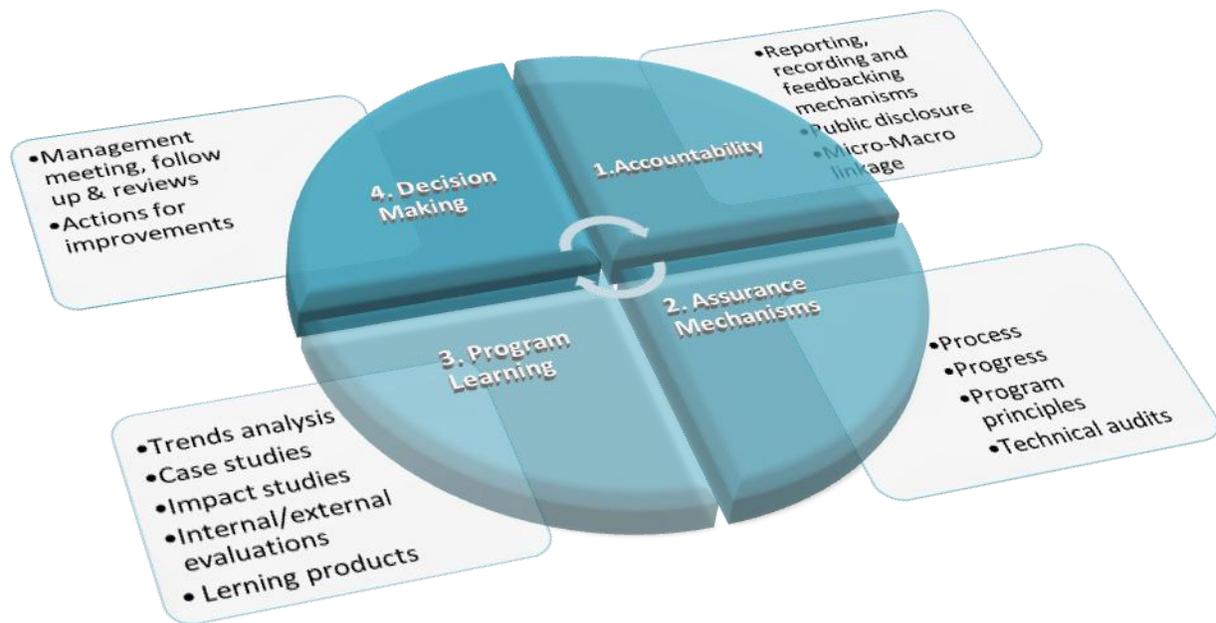




**Alternative Energy Promotion Centre,
National Rural and Renewable Energy Programme (NRREP)**



NRREP Result Framework

June 2013

Contents

1	WORKING DEFINATIONS.....	1
2	ABOUT THE FRAMEWORK.....	2
2.1	Background:	2
2.2	Current Scenario:	2
2.3	Justification for the development of a Result framework:	2
2.4	Objective:	3
2.5	Further Development:	3
2.6	Use of the framework:	4
2.7	Further steps:	4
3	NRREP RESULT FRAMEWORK.....	1
3.1	Program Objective Level:	1
3.2	Program Outputs Level:	4

WORKING DEFINITIONS

NRREP's Result based Monitoring and Evaluation framework follows meaning of key terminologies as defined by National Planning Commission (NPC) as below.

Monitoring: means the regular and periodic act of assessment to be performed by the management itself at different levels or the person, agency or group designated by the management. It is mainly done to confirm whether the pre-determined inputs and means for development policy, programme and project or the flow of other activities relating to these, have been implemented properly or not and whether the expected outputs have been achieved or not by implementing the programme according to the plan of action.

Evaluation: means the act of assessment performed logically and in a systematized manner by the management itself at different levels or the person, agency or group designated by the management. It is to confirm to what extent activities are relevant, beneficial and effective regarding the set objectives of development policy, programme and project.

Result: means the output, production or outcomes/effect (desired undesired or positive/negative) achieved from the implementation of any programme.

Programme: means the project, working modality relating to different sectors directed by the specific objective or the integrated structure of the services.

Project: means the structure of the correlated activities implemented in the specific area and within certain timeframe for achieving certain objectives.

Indicator" means the basis of monitoring and evaluation to measure quantity and quality of development or the changes.

Work performance indicator: means the indicator used for the quantitative or qualitative measurement against the approved goal or for measuring the work performance, working efficiency, outcomes, etc according to any other system.

Input: means the financial, human and other physical resources required to achieve the desired and necessary outputs through the planned activities.

1 ABOUT THE RESULT FRAMEWORK

1.1 Background:

The NRREP program document has envisioned to establishing a Result Based M&E system of NRREP. The program document anticipates that the NRREP's monitoring and reporting system ought to be aligned with the guidelines of National Planning Commission and Ministry of Finance. One of the key mandates of the NRREP program documents include generating relevant monitoring data on energy related climate change impacts as well as socio-economic impacts including GESI. For this purpose the document recommends for establishing Result based management system that include planning for results, implementation, performance review and evaluation assessments. Another key provision is to establish a Web based MIS system be accessible to the public and all stakeholders. Based on the set results, the NREEP is responsible to regularly make assessments on the degree of progress towards reaching the development impact and outcomes. The NRREP has also provisioned to establish baseline and regular feedback mechanisms within the M&E system. Further, it plans to include the relationships to all three components of NRREP and also to monitoring at lower levels of the Logical framework hierarchy.

1.2 Current Scenario:

The NRREP/MQA unit has broadly assessed the available result areas in the program document and gaps towards developing a Result framework (Log frame) of the NRREP. Please refer to the following table to discover available results and missing areas.

Result Areas	What is available	What is Missing
1. Program Objective	<ul style="list-style-type: none">Well defined Program ObjectiveProgram risk/assumption in elaborated form.	<ul style="list-style-type: none">Indicators of work performanceMeans of verification for monitoringAssumption/riskBaseline to establish indicatorsLinkage between outputs and outcome
2. Immediate Objective	<ul style="list-style-type: none">Immediate objectives of components	
3. Program outputs	<ul style="list-style-type: none">Well defined Program outputs of components with quantitative program targets	
4. Activities	<ul style="list-style-type: none">Component wise major activitiesSub activities in the annual work plan	

1.3 Justification for the development of a Result framework:

As per the program document, preparation of result frame work is one of the obligations of the NRREP to be accomplished during inception period. Not only from the obligation side, is it an urgent process to smoothen other activities of the NRREP as well. In

absence of a complete result framework (particularly performance indicators), following vital PME activities are being held up.

- Identification of essential baseline indicators
- Designing of MIS framework
- Designing an effective reporting framework
- Creating a credible basis for future program evaluation
- Establishing proper linkages of results at different levels while planning.

These reasons clearly indicate that there is a need for the development of a complete result framework to guide result based management system (planning, monitoring and evaluation) with priority to overcome above constrains and fulfill our obligation.

1.4 Objective:

The board objective of this framework is to enhance the Result based management system within AEPC/NRREP so that the performance of AEPC/NRREP interventions can be meaningfully assessed and improved.

However, the specific objectives of this framework are

- to implement result based monitoring and evaluation method, process and tools to assess the program performance regularly, effectively so that it can help achieve the desired results of NRREP
- to help ensure the NRREP follows result based planning and monitoring systems for maximum use of inputs to produce desired outputs, outcomes and impact as per expected quantity, cost, time and quality.

1.5 Development Process:

NRREP has developed draft NRREP result framework during the inception period. Please refer to the **section II** below for the NRREP result framework. The result framework was developed internally following the participatory approach. A series of interactions and group exercise were carried out to develop the draft frame work. Key process include-

- The MQA unit initiated ground works towards development of result framework. An Interaction with all components regarding the result framework of NRREP was carried out initially. After the consent of all components, the preparation process was advanced.
- MQA unit has identified National development indicators where the NRREP's outputs/outcomes can be linked to exhibit our contributions.
- MQA unit prepared a preliminary draft of result framework referring NRREP documents, Three years interim plan, NPC guidelines and other relevant literatures.

- A two-day internal workshop was conducted to orient senior AEPC/NRREP staff on result based management and develop indicators for the results. A Log frame Expert (Dr. Krishna Babu Joshi) was hired to facilitate the process.
- Series of small group meeting organized to fine tune the draft result framework.

1.6 Use of the framework:

After the approval of the result framework, it will be implemented within the scope of the program. The results will be immediately aligned with MIS, baseline, planning process, reporting process etc. It will use to measure the changes of results periodically. Further, it will help to carry out mid- term evaluation and final evaluations of the program. In other words, the framework will use to enhance the result based culture and management in the AEPC/NRREP.

1.7 Further steps:

The result framework indicators are subject to revise/amend as per the need and emerging requirement. Every year, before starting planning process, the result framework will be reviewed using appropriate methodology. The performance indicators in particular, will be categorically assessed in terms of four criteria- (i) *achieved*; (ii) *on-track to be achieved*; (iii) *slow or off-track and needs acceleration*; and, (iv) *not going to be achieved*. Off-track indicators will be realigned; replaced or omitted with proper justifications. The level of achievements against the set objectives will be realigned based on the progressive status of indicators. The result framework will be revised in case there are changes in the results due to any valid reasons. MQA unit will coordinate to prepare and update the result framework.

2 NRREP RESULT FRAMEWORK

2.1 Program Objective Level:

Result Chain	Descriptive Summary	Indicators of Work Performance	Means of Verification	Key Assumptions
Program Objective	To improve the living standard of rural women and men, increase employment of women and men as well as productivity, reduce dependency on traditional energy and attain sustainable development through integrating the alternative energy with the socioeconomic activities of women and men in rural communities.	<ul style="list-style-type: none"> Benefited additional 12% rural people from Renewable energy of them 50% are women and 30% DAG. Reduced dependency on traditional energy sources by 85% from 87.1 % (baseline) HH income increased by 20% (increased revenues and /or decreased expenses) in the intervention areas from baseline. Increased employment by 30,400¹ through RET services from estimated 19,814² baseline. Increased employment by 19,000 through MSMEs of which 50% are women and 30% DAG. 	<ul style="list-style-type: none"> Midterm Evaluation Final Evaluation Impact studies Government reports 	<ul style="list-style-type: none"> Committed funds are available on time. Conducive Socio-political environment in the country. All benefited are integrating with socio-economic activities.
Immediate Objective-1	to institute the CREF as the core financial institution responsible for the effective delivery of subsidies and credit support to the	<ul style="list-style-type: none"> Established CREF institution set-up Approved operational manual on CREF Signed agreement with the at least 6 commercial banks Increased availability of financial resource by 75% for the development of renewable energy sector compared to base year. 	<ul style="list-style-type: none"> MoUs with financial institutions CREF Audit report End of project report 	<ul style="list-style-type: none"> Legislation to enact CREF approved on time.

¹ Total sum of Biogas-11,000, Solar- 8,000, CE- 10,000, and Biomass-1,400

² Total sum of Solar- 5,814, Biogas-9,000 & CE- 5,000

Result Chain	Descriptive Summary	Indicators of Work Performance	Means of Verification	Key Assumptions
	renewable energy sector.	<ul style="list-style-type: none"> Disbursed 75% of approved annual funds for credit. 		
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.	<p><u>Biomass:</u></p> <ul style="list-style-type: none"> Increased 8.8 % of ICS users from baseline year of which 50% belonging to DAG and women. Declared 500 IAP free VDCs by 2017. Sustained cleaner cooking technologies by the 90 % of ICS users. Reduced respiratory diseases in the intervention areas. <p><u>Biogas:</u></p> <ul style="list-style-type: none"> Benefited 95,000 (19,000 plant) including 50% women and 30% DAG of additional rural population from biogas per year. Supported 95% of biogas in use after one year of installation. Used slurry by 70% of biogas owners for agricultural purposes. Reduced respiratory diseases in the intervention areas. <p><u>Solar:</u></p> <ul style="list-style-type: none"> Benefited 30 Lakhs (600,000 system) of additional population including 50% women and 30% DAG from solar energy by 2017 Promoted 95% of the solar systems (by numbers) are in use and functional after 1 year. <p><u>Community Electrification:</u></p> <ul style="list-style-type: none"> Increased access of hydro electric energy to 750,000 (150,000 HHs) additional rural population including 50% women and 30% DAG by 2017. Promoted and functional 95 % of mini/micro hydro systems. 	<ul style="list-style-type: none"> Policy instruments Impact study reports Case studies Independent monitoring reports Base line Focused study reports NRREP progress reports 	Annual plans are effectively implemented and monitored. 5 people per household, 2010 CBS

Result Chain	Descriptive Summary	Indicators of Work Performance	Means of Verification	Key Assumptions
		<p><u>Institutional Development:</u></p> <ul style="list-style-type: none"> • Achieved more than 80% of financial expenditure. • Designed and implemented appropriate tools for capacity assessment and development including GESI. • Assisted GoN on RE related policy formulation and instruments including subsidy policy and delivery mechanism. <p><u>Monitoring and quality assurance:</u></p> <ul style="list-style-type: none"> • Assured effective result based GESI responsive planning, monitoring and quality assurance systems. <p><u>GESI:</u></p> <ul style="list-style-type: none"> • Prepared and implemented GESI mainstreaming plan. 		
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.	<ul style="list-style-type: none"> • Registered 1,300 new MSMEs formally. • Upgraded 2,800 existing MSMEs with increased profit of 12%. • Received grant by 15,300 HHs for IG/PEU activities of which 50% is DAG HH. • Created and operational 70 % of MSMEs after a year of creation. • Increased 19,000 employment including 50% women and 30% DAG owned MSMEs. 	<ul style="list-style-type: none"> • Progress reports • Guidelines, manuals and catalogues • MSME database 	

2.2 Program Outputs Level:

Result Chain	Descriptive Summary	Indicators of Work Performance	Means of Verification	Key Assumptions
Immediate Objective-1	<i>To institute the CREF as the core financial institution responsible for the effective delivery of subsidies and credit support to the renewable energy sector.</i>			
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	<ul style="list-style-type: none"> • Drafted CREF Financial Intermediation Mechanism. • Drafted CREF operational guidelines. • Identified at least 6 financial intermediates. 	<ul style="list-style-type: none"> • CREF Financial Intermediation Mechanism • CREF operational guidelines • Agreements • Annual progress report • Audit reports • NRREP SC Meeting Minutes/MoUs 	<ul style="list-style-type: none"> • Enabling legislations enacted • Sufficient funds allocated to CREF. • AEPC and relevant organization cooperate with CREF. • High commitments and continued engagement of financial intuitions.
Output 1.2	Efficient and effective delivery of credit to RET sector through Banks and MFIs	<ul style="list-style-type: none"> • number of projects recommended for credit facilities • 75% increased in availability of financial resources for the development of renewable energy sector compared to base year. • 75% of approved annual funds for credit disbursed 	<ul style="list-style-type: none"> • CREF annual reports with disaggregated data • Audit reports • Loan approval letters from CREF banks indicating concessions given to GESI focused DAG, 	<ul style="list-style-type: none"> • Government approves modified subsidy policies/delivery mechanism. • credit is alien with subsidy is alien with in equal ratio

Result Chain	Descriptive Summary	Indicators of Work Performance	Means of Verification	Key Assumptions
			VC, poor, Victims of war, marginalized groups, etc. <ul style="list-style-type: none"> Annual monitoring reports 	
Output 1.3:	Efficient and effective delivery of subsidies to RET sector in close consultation with AEPC	<ul style="list-style-type: none"> number of project recommended for subsidy Ratio of loan to subsidy gradually increased in consecutive years. Subsidies are provided following national subsidy policy and delivery mechanism Subsidy received by poor and marginalized people of remote areas. 	<ul style="list-style-type: none"> CREF annual reports Audit reports Annual monitoring reports Project documents 	<ul style="list-style-type: none"> End use principles are addressed during the feasibility study stage of CE projects
Immediate Objective-2	<i>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.</i>			
Output 2.1	Scaled up implementation network is in place for biogas – Sector commercialization and GESI and Regional concerns	<ul style="list-style-type: none"> Established functional network with at least 10 national organizations (e.g. health, education, tourism, security sector institutions) for wider dissemination targeting to reach DAG HHs. Data base installed to support quality assurance and control. Installed additional 95,000 domestic biogas plants of which 30% are targeted to DAG HHs, including 90,000 for remote areas Ensure 20% of biogas companies working in low biogas constructed and remote districts 	<ul style="list-style-type: none"> Monitoring reports Progress reports MIS MoU/agreements with different forums/networks GESI responsive supporting mechanism 	<ul style="list-style-type: none"> Private companies are interested to work in remote areas

Result Chain	Descriptive Summary	Indicators of Work Performance	Means of Verification	Key Assumptions
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	<ul style="list-style-type: none"> • Integrated Waste to Energy policy issues in the national Renewable Energy Policy • Installed 1,000 institutional biogas plants. • Installed 200 community biogas plants of which 30% are DAG owned. • Piloted 10 new biogas technologies in different geographical regions. • Installed biogas plants are functional by 95%. • Installed 8,500 commercial biogas plants. • Installed 20 Waste to Energy projects in Municipal Scale at 20 locations. 	<ul style="list-style-type: none"> • Monitoring reports • Progress reports • MIS with disaggregated data base system 	<ul style="list-style-type: none"> • Private companies are interested to work in remote areas • Feasible demands exist.
Output 2.3	Scaled-up implementation of ICS	<ul style="list-style-type: none"> • Integrated IAP Free /clean cooking solution issues in revised renewable energy policy- 2013 • Promoted additional 475,000 improved cooking stoves (metallic-35,000, mud-440,000) of which 30% are DAG in all 75 districts through NRREP supports. • At least 90% installed ICS are in operational state and certified as IAP Free • Established network at national level to support IAP Free campaign, resource mobilization and extensive coverage. • Trained 6,000 stove masters of which 50% are women and 30% are DAG. 	<ul style="list-style-type: none"> • Policy documents • MoU/agreements with collaboratos • Monitoring reports • Progress reports • MIS 	<ul style="list-style-type: none"> • Feasible demands exist. • Awareness on benefits of indoor pollution free status is massively spread. • Private companies are interested to work in remote areas • Drastic enhancement of staff structure in field and central level • Massive involvement of third party

Result Chain	Descriptive Summary	Indicators of Work Performance	Means of Verification	Key Assumptions
Output 2.4	New & improved biomass energy technologies such as enterprise scale stoves, gasifiers and bio-briquetting are ready & field tested	<ul style="list-style-type: none"> • Piloted at least 3 new ICS models in different geographic locations • Piloted enterprise scale stoves at different large scale institutions • Trained 100 bio-briquette entrepreneurs in improved technologies including 50% women and DAG At least 10 number of gassifier plants piloted 	<ul style="list-style-type: none"> • Monitoring reports • Progress reports • MIS 	<ul style="list-style-type: none"> • Feasible demands exist. • Conducive environment for the investors in biomass.
Output 2.5	2.5.1 Update knowledge of evolving rules and regulation in different carbon markets	<ul style="list-style-type: none"> • Strengthened institutional networking of AEPC on climate change at national and international level • Mobilized additional financial resources through climate change program • Supported GoN/MoSTE to formulate climate change related policy, strategy, program formulation/implementation • Supported to increase capacity of academic institutions, GoN and private scetor towards addressing climate change issues 	<ul style="list-style-type: none"> • Progress reports • Training reports • Government records. • TU website • Various Master's Thesis 	<ul style="list-style-type: none"> • The continuous interest from Development Partners and the Government
	2.5.2 Develop a well diversified portfolio of projects using different instruments	<ul style="list-style-type: none"> • Developed two additional carbon projects in the areas of Solar and larger biogas • Included CPAs in Biogas, ICS & IWM PoA CDM from 2013 • Supported to prepare GESI responsive Climate and Energy Plans in 72 districts and provided technical support to implement it 	<ul style="list-style-type: none"> • Study/Research reports • UNFCCC and other voluntary emission reduction providers websites • DCEPs reports 	<ul style="list-style-type: none"> • Targeted RETs remain eligible and price of carbon is stable.
	2.5.3 Put in place quality and performance assurance system and monitor continuously	<ul style="list-style-type: none"> • Prepared and submitted Emission Reduction monitoring report to DOE annually • Prepared and submitted CBP monitoring report to buyer annually 	<ul style="list-style-type: none"> • User Surveys • AEPC's MIS database • Copies of logbooks • Progress report 	<ul style="list-style-type: none"> • Effective coordination with other NRREP's components
	2.5.4 Support external		<ul style="list-style-type: none"> • Monitoring/Verifi 	<ul style="list-style-type: none"> •

Result Chain	Descriptive Summary	Indicators of Work Performance	Means of Verification	Key Assumptions
	monitoring and verification in effective manner	<ul style="list-style-type: none"> • Verified and registered 5 CDM projects (4 biogas & 1 micro-hydro) annually • Registered and verified 3 PoA CDM (Biogas, ICS & IWM) 2014 onwards annually • Registered and verified 2 new carbon projects/programs 2016 onwards 	<ul style="list-style-type: none"> • cation reports • UNFCCC and other voluntary emission reduction providers websites • Ministry of Finance records 	
Output 2.6	A highly developed fraud-proof registration, eligibility-checking and verification system for solar energy systems (SHS, SSHS, ISPS and PVPS)	<ul style="list-style-type: none"> • Developed and piloted Electronic system for fraud-proof registration in two remote districts by Dec. 2013 • Mainstreamed Outcomes of the piloted electronic fraud-proof registration system by the end of 2014. • Decreased deviated cases by 50 % by the programme period • Revised and implemented Quality Control and Monitoring Mechanism, practices and improved. • Installed 1,550 (Institutional-1,200 and Drinking water pumping systems-350) benefited to 31,000 hh including 30% DAG and women headed hh. • Promoted 600,000 SHS and SSHS benefited to 30,00,000 population including 50% women and DAG. • Produced 14 MWp additional power by Solar systems (SHS – 10 MWp, SSHS- 2MWp, ISPS- 1.5 MWp, PVPS – 0.5 MWp) • Out of installed Solar Systems, at least 30 % belong to socially disadvantage people. 	<ul style="list-style-type: none"> • Quality assurance mechanism • Monitoring reports • Progress report • MIS 	<ul style="list-style-type: none"> • Demands from the eligible users. • Effective enforcement of penalty measures.
Output 2.7	Used Battery management introduced and functional, and in	<ul style="list-style-type: none"> • Prepared and approved Battery Management Regulation and is in effect by the end of 2013 • Developed Mechanism for collection of used lead battery and at least five battery collection centers 	<ul style="list-style-type: none"> • Progress reports • AEPC records • Monitoring reports 	<ul style="list-style-type: none"> • Conducive environment for the investors/Battery

Result Chain	Descriptive Summary	Indicators of Work Performance	Means of Verification	Key Assumptions
	compliance with international standard	<p>are established in five different locations by the of July 2014.</p> <ul style="list-style-type: none"> Established a battery management recycling plant in feasible location and operated by the end of 2015. Collected and recycled at least 200,000 number of used batteries by 2017 	<ul style="list-style-type: none"> Recycling plant is in operation 	collectors.
Output 2.8	Some Viable "large Community PV Systems' are operational	<ul style="list-style-type: none"> Extended support to 500 number of solar energy based PEUs generating 8,000 employment and 2.5 MWp additional power (produced by large community PV systems including ISPS/PVPS) and piloted. 10 mini-grids including 1,600 number of large community PV system (ISPS/PVS) of which 30% belonging to DAG. Integrated RE Policy addressing solar mini grid issues and guidelines are developed addressing 	<ul style="list-style-type: none"> Progress reports AEPC records Monitoring reports 	<ul style="list-style-type: none"> Feasible demands exist for large PV systems.
Output 2.9	Solar thermal domestic devices (dryers, others) are ready for the market	<ul style="list-style-type: none"> Developed modality for solar thermal and implemented. Increased demands for Solar thermal by 20% compared to base year. Established 7,500 numbers of solar drier/cookers and benefited to 37,500 people including 50% women and 30% DAG. Supported, piloted and up scaled 5 large scale thermal systems by the end 2015. 	<ul style="list-style-type: none"> Progress reports AEPC records Monitoring reports 	<ul style="list-style-type: none"> Feasible demands exist for large PV systems.
Output 2.10	Project management capacity is in place and performing, and number of completed projects increases at a faster rate.	<ul style="list-style-type: none"> An installation of 4000-6000 kW of hydro power is in place constantly per annum. Completed 1,000 of additional community electrification projects at progressive rate (including Micro Hydro, Mini and Pico). Enhanced Quality Control and Monitoring Mechanism in place practiced and reviewed. 	<ul style="list-style-type: none"> Monitoring reports Progress reports Quality assurance mechanism NRREP MIS 	<ul style="list-style-type: none"> Enough capacity of manufactures and installers Bank loans are disbursed in time. Arrangement of

Result Chain	Descriptive Summary	Indicators of Work Performance	Means of Verification	Key Assumptions
		<ul style="list-style-type: none"> Reduced average project cycle to 2.0 years. Generated 25,000 kW of hydropower through mini and micro hydro projects benefitting directly 150,000 households including 50% women and 30% DAG. 	with disaggregated data base	<ul style="list-style-type: none"> matching funds by communities on time.
Output 2.11	Community electrification projects better designed with regard to available potential, and operate at a higher load	<ul style="list-style-type: none"> Upgraded guideline/standards and skills of engineering professionals up to 3 MW are developed. Service providers are well versed on new policy/approaches/ standards with a view to optimize project design. Supported PEU to increase plant factor of micro hydro to 40 % by the end programme period. Reduced plant shutdown period by 15% in relation to equipment failure in a year compared to baseline year. 	<ul style="list-style-type: none"> Monitoring reports Progress reports DFS reports 	
Output 2.12	Community electrification technology is scaled-up and is of a higher standard	<ul style="list-style-type: none"> Installed/ piloted at least 5 Mini hydro and local grids/ regional grid/ grid connection, based on feasibility study, in potential micro hydro installed sites. Increased fabrication/assembly capacity of local manufacturers up to 1 MW. Increased technical standards of transmission & distribution system of MHP to NEA standard. Promoted average size of projects of greater than 35 kW. Increased designed overall efficiency of Micro / Mini Hydro by more than 70% and linked with energy use for productive economic activities. 	<ul style="list-style-type: none"> Monitoring reports Progress reports DFS reports Records of CE operators. 	<ul style="list-style-type: none"> Higher standard technologies easily available Private is willing to invest in this sector.
Output 2.13	Improved Water Mills promotion is scaled-up and the technology is of a higher standard	<ul style="list-style-type: none"> Increased capacity of IWM sector/stakeholder by 50% from 33% in operation and management. Increased overall efficiency of IWM by 43% from 33%. Supported service providers to develop 4000 	<ul style="list-style-type: none"> Monitoring reports Progress reports 	<ul style="list-style-type: none"> Higher standard technologies available locally.

Result Chain	Descriptive Summary	Indicators of Work Performance	Means of Verification	Key Assumptions
		<p>numbers of IWMs benefiting to 80,000 HHs and 400,000 people including 50% women and 30% belonging to DAG.</p> <ul style="list-style-type: none"> • Increased outreach to 53 districts. • Increased technical standards of IWM up to pico (5kW). 		
Output 2.14.1-2.14.3	AEPC is recognized as an effective, efficient institution for the promotion and development of the RE sector	<ul style="list-style-type: none"> • Developed, submitted and approved GESI responsive RE policies, strategies, and plan prepared. • Drafted and submitted AEPC Bill/Act for approval • Developed, approved implemented and refine GESI responsive SOD and NRREP guidelines. • Completed of AEPC development interventions and projects timely • Prepared plans and reports with due participation timely. • Implemented performance management and improvement mechanisms including individual capacity building/learning. • Established functional relationship with government, DPs and stakeholders. • Ensured coordination and collaboration (including orientation) with major stakeholders beyond RE sector (e.g. forest, agriculture, FNCCI, etc). • Produced quality engendered knowledge products and ensured appropriate knowledge dissemination to extend outreach. • Established partnerships evidence of 10 functional public, private partnership (PPP) models in the RE sector. • Promoted R&D on RE sector to design gender friendly technology. 		
Output 2.14.4	Develop and Implement AEPC Monitoring and Quality	<ul style="list-style-type: none"> • Developed and functional GESI responsive result-based M&E framework by 2013 Established and functional NRREP MIS with beneficiaries' 	<ul style="list-style-type: none"> • MQA framework • NRREP MIS • NRREP Baseline 	<ul style="list-style-type: none"> • MQA unit is functional • Qualified staff are

Result Chain	Descriptive Summary	Indicators of Work Performance	Means of Verification	Key Assumptions
	<p>Assurance systems for effective result - based management</p> <p>(Considered as separate output#18)</p>	<p>categorization by Dec 2013</p> <ul style="list-style-type: none"> • Established and functional a Random Monitoring Mechanism by March 2013. • Established baseline -2012 with sex and caste segregated data of each technology at all level by 2013. • Developed and functional feedback and quality assurance system by 2015. • Produced at least 5 M&E reports/learning products • Produced periodic progress reports (quarterly/annual). • Assessed at least two impacts of the program interventions through studies and technical audits. 	<ul style="list-style-type: none"> • Monitoring reports • Study reports 	<p>in place</p> <ul style="list-style-type: none"> • Cooperation from all components Required budget is available
<p>Output 2.14.5</p>	<p>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</p> <p>(Considered as separate output#19)</p>	<ul style="list-style-type: none"> • Addendum GESI concerns in RE policy, program, periodic plan rules/regulation and guidelines. • Prepared and mainstreamed GESI tool box for AEPC/NRREP, DEES, private sector and RSCs by 2015. • Developed and implemented social mobilization guideline by 2015. • Developed and implemented GESI audit guideline and procedure by 2014. • Ensured GESI responsive plan and budget in AEPC/NRREP, regional service centers and DEEs. • Prepared and implemented 4 years capacity development and gender mainstreaming plan by 2014. • Disseminated GESI responsive RET promotional information through media, posters etc. • Increased outreach of RET services through collaborating with right-holder institutions of women and DAG associated networks • Established knowledge management system for 	<p>RE policy, program, periodic plan rules/regulation and guidelines GESI tool box</p> <ul style="list-style-type: none"> • Social mobilization guideline • Training reports • GESI audit guideline • AWP • CD and Mainstreaming plan • Reports • Publications and radio broadcasting reports 	<ul style="list-style-type: none"> • All components/sub component/units are GESI responsive.

Result Chain	Descriptive Summary	Indicators of Work Performance	Means of Verification	Key Assumptions
		GESI mainstreaming.	<ul style="list-style-type: none"> Meeting minutes Knowledge product 	
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	<ul style="list-style-type: none"> DDC owned DEES in all districts. Endorsed GESI responsive DCE Plan and budget in all DDC. Ensured effective implementation of DEES guidelines by DDCs. Trained DEES staff in line with identified gaps including GESI. Established an effective functional linkage across AEPC, Private Sector, RSC and DDC. Ensured DDCs RE activities to reflect NRREP annual plan and vice versa.. 50 number of RE projects conducted public/GESI audits in the leadership of DDCs. Created demand on RE technology among women, poor & DAG through awareness creation, social mobilisation and interaction. 	<ul style="list-style-type: none"> DEEU/S Guideline DEEU/Ss progress reports NRREP progress reports DDC annual plan NRREP AWP 	<ul style="list-style-type: none"> DEEU/Ss are fully accountable to AEPC and local bodies DEEU/Ss follow the AEPC guidelines DDCS fully internalizes DEEU/Ss.
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	<ul style="list-style-type: none"> Selected and contracted required RSCs at all times. Developed and implemented RSC Operational Guideline including GESI functions by 2013. Ensured RSC coverage in all DDCs. Trained RSCs' staff in line with identified gaps to enhance RSC capacity. Ensured GESI responsive activities and budget in annual plan Ensured support to capacitate RSCs for effective service delivery reaching to women, poor & DAG. 	<ul style="list-style-type: none"> RSC Guidelines MOUs/ agreement AEPC records RSC progress reports Monitoring reports 	<ul style="list-style-type: none"> RSCs are fully accountable to AEPC and local bodies RSCs follow the AEPC guidelines
Immediate objective-3	<i>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.</i>			
Output 3.1	Capacities of existing MSMEs are enhanced	<ul style="list-style-type: none"> Developed GESI responsive PEU implementation guidelines by 2013 Developed training manuals and end-use 	<ul style="list-style-type: none"> Monitoring Reports MSMEs 	<ul style="list-style-type: none"> Sufficient no. of MSMEs are available in RE

Result Chain	Descriptive Summary	Indicators of Work Performance	Means of Verification	Key Assumptions
		catalogue addressing GESI concerns/issues <ul style="list-style-type: none"> Received technical and/or financial supports by 2,800 existing MSMEs using RETs out of which 25% will be owned and run by women and DAG. Established Business Promotion Units in all RSCs 	database <ul style="list-style-type: none"> Interviews with entrepreneurs Impact studies 	catchment area <ul style="list-style-type: none"> Sufficient and reliable power available for MSMEs Financial and business development services are available.
Output 3.2	New and innovative MSMEs are created and operationalised, with a specific emphasis on integrating women and marginalized section of the population	<ul style="list-style-type: none"> Formally registered 1,300 units of new and innovative MSMEs of which 25 % are owned and run by women and DAG. 	<ul style="list-style-type: none"> Progress reports Monitoring reports MSMEs database Interviews with entrepreneurs Impact studies 	<ul style="list-style-type: none"> Financial and Business Development Services are easily available. Entrepreneurs are willing to invest in innovative MSMEs
Output 3.3	Appropriate business development services are available to MSMEs in RE catchments	<ul style="list-style-type: none"> Described BDS are appropriate by the 75 % of MSMEs in their area any time. 	<ul style="list-style-type: none"> Monitoring reports Interviews with BDS providers and entrepreneurs 	<ul style="list-style-type: none"> Conducive environment for BDS.
Output 2.17	Income generating activities (IGA) for households using RE are developed and implemented in catchments areas	<ul style="list-style-type: none"> Developed IGA guidelines by end of 2013 Received grant by 15,300 HHs for IG/PEU activities of which 50% belonging to DAG and women. Supported 1,000 indigenous and traditional skills based IG activities. 	<ul style="list-style-type: none"> Monitoring reports Progress reports Interviews with households Impact studies 	<ul style="list-style-type: none"> Financial and Business Development Services for IGA are easily available