United Nations Development Programme – INDIA CPAP 2008-2012

Annual Work Plan 2011 (January - December) (REVISED)

Project Title: Removal of Barriers to Biomass Power Generation in India

Award ID: 00043810 Project ID: 00051271

Project Start and End Date: 01.04.2007 to 31.12.2012

Corresponding CP Outcome(s): Progress towards Meeting National Commitment under Multilateral

Environmental Agreements.

Corresponding CP Output(s): National Development Efforts with Co-benefits of Mitigating Climate

Change

Project Results description as outlined in approved project brief:

| Project outputs | Indicators | Baseline | | | |
|---|--|---|--|--|--|
| Technology Package Benchmarking and Validation for different bio-mass power technologies | Review of state-of the-art technologies commercially available worldwide and Documentation of operating performance parameters including 'Good Practices' on various aspects of sub MW biomass power plants | Poor reliability and inadequate information of biomass power technologies, both captive and distributed and on projects available to the major stakeholders. | | | |
| | Mapping of Biomass for power generation in different states | Non-availability of consistent and dependable data / estimates of surplus biomass for all geographic areas in different states | | | |
| Enhanced Confidence of Project Promoters, Financial Institutions, Regulators, Policy Makers, SNAs, other Stakeholders through Effective Information Development & Dissemination Program | Review of Policy Framework currently in place for promotion of use of biomass for generation of power and Development of Generic Documents and Guidelines for different types / sub-sectors of biomass power | Wide variation in Policy & Regulatory environment and inadequate information on various aspects of BPP and bagasse cogeneration in sugar industries, to project developers and other key stakeholders | | | |
| | Organizations of Business Meets & Workshops, Study Tours / Fellowships / participation in International Events for capacity building at national level and in targeted states | Inadequate information, orientation and technical skills available to the major stakeholders | | | |
| Development of Institutional Framework | Development of Business, Commercial and Support Services Networks for creation of effective Institutional Framework in different states | Inadequate Institutional Framework at National, Regional and Local Levels for large scale multiplication of biomass power technology and projects | | | |



| Creation of Fund for Contingent Financing | Short listing of specific FIs at National and focused state levels for Creation of Fund for Contingent Financing and Development of restructured financial models | Inadequate skills, experience and commitment to provide finance to biomass power projects | | | |
|---|---|--|--|--|--|
| Model Investment Projects (MIPs) | Implementation of MIPs models for demonstration of biomass power technologies | Models for implementing BPP do not exist either for captive or distributed biomass resources | | | |
| Project Management Unit | Project Staff in place | None | | | |

Project and AWP 2011 BUDGET:

| UNDP funds | Government funds* | | Total |
|-----------------|-------------------|---|---|
| 5,650,000 | 5,240,000 | | USD 10,890,000 (for entire project duration) |
| 850 ,950 | - | - | USD 850,950 (for 2011) |

^{*}Mention donor between brackets

^{* 4,000,000 (}GOI)

| Project budget | Actual exp in 2007 | Actual exp in 2008 | Actual exp in 2009 | Expected exp in 2010 | Budget 2011 | Budget 2012 |
|----------------|-----------------------|-----------------------|-----------------------|----------------------|----------------|----------------|
| 5,650,000 | 594,870 | 1,073,330 | 367,566 | -270,000 | 850,950 | |

Agreed by (Implementing Partner): Ministry of New and Renewable Energy

संयुक्त सचिय / Joint Section निर्माण करित सचिय / Joint Section निर्माण करित करित सचिय / Joint Section निर्माण करित सचिय / Joint Section निर्माण करित सच्चार / Govt. of India निर्माण करित सच्चार / Govt. of India निर्माण करित सच्चार / New Delhi-110003

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Agreed by UNDP:

United Nations Development Programme

30 Aug 20 11

| 15000 | | | Sub-total 5 | |
|--------------------------------|---|--------------------------------------|---|---|
| 15,000 | PMC/MNRE 71300 | Dec. 2011 | Development of Financial Models for MIPs and finalisation of Financial Institutions for Operation of Funds for Contingent Financing. | Creation of Fund for Contingent Financing |
| 25000 | | | Sub-total 4 | |
| 25,000 | PMC/MNRE 72100 | Dec. 2011 | Organisation of capacity building activities for selected institutions/farmers cooperative/entrepreneurs/Self help Groups (SHGs) for mainstreaming their activities for promotion of Fuel Supply Linkages. | Business and Commercial Networks |
| 25,000 | | | Sub-total 3 | |
| 5000 15000 5000 | PMC/MNRE 71600 72100 74500 | Dec. 2011 | Organization of 4-6 dissemination programmes (business meets / workshops) Study tours, fellowship trainings and participation in international events(two each) involving major stakeholders - Project Promoters, Financial Institutions, State Nodal Agencies, Technical Institutions, and Local Entrepreneurs / Self help Groups (SHGs) etc. | Capacity Building |
| טטט,טטו. | | | Sup-total Z | |
| 50000 5000 40000 5000 | PMC/MNRE 71300 71600 72100 74500 | Dec. 2011 | Preparation of Detailed Project Report for setting up MIPs. Resource and Risk Assessment studies for MIP's. Evaluation of Fuel Supply Networks for Machinery and Equipment Package for harvesting, collection, transportation, processing and storage of biomass / crop residues. Publication of BioEnergy Magazine | Increase Information and Knowledge |
| 95000 | | | Sub-total 1 | |
| 10000 5000 75000 5000 | 71300 71600 72100 74500 | Dec. 2011 | Development of MW capacity Biomass Gassifier system Study on Utilization of IC Engine Exhaust for Heating and / or Cooling | Technology Improvements |
| | PMC/MNRE | Dec. 2011 | Establishment of Test Centre and Regional Test Centres for Performance Evaluation, Benchmarking of Design and Equipment of sub MW biomass system. | |
| Budget (USD) | RESPONSIBLE PARTY (where possible)/Account Code | Indicative month of completion | PLANNED ACTIVITIES Remember to add M&E activities and procurement activities, as applicable | Project Targets for 2011 Remember to ensure that targets are 'SMART' |

| Al | | Travel, Project Monitoring and Capacity Building (2% of Annual Budget) | Communication, Audit, Monitoring • UNDP cost for Communication and Advocacy Activities (1% of Annual Budget) and Evaluation | | Misc PMU support start | Project Management Unit • Technical /Project Assistant @ Rs. 25000 pm | Two Technical Officers/Project Consultants each @ Rs. 50,000 pm | Project Management | Sub-total 6 | | | MIP's | Grid Connected Biomass Power and Cogeneration in small capacity sugar mills. | Color of the Capture of Capture of Capture of the C |
|------------------------|-------------|--|--|-------|------------------------|--|---|--------------------|-------------|--------|-------|-------|--|--|
| AWP Grand Total in USD | Sub-total 7 | Building (2% of Annual Budget) | cacy Activities (1% of Annual Budget) | | | | its each @ Rs. 50,000 pm | | 16 | | | | in small capacity sugar mills. | Tionado in Door, |
| | | | 74500 | 74500 | 72100 | Dec. 2011 71600 | 71300 | PMC/MNRE | | 72800 | 72100 | 71600 | 71300 | DOG: NOTE |
| 850,950 | 108000 | | 43950 | | | 10000 | | RE | 482,950 | 457950 | | | 10000 | 7 |

Notes:

up MIPs towards innovative/critical imported components and/or mitigation of investment risk will be met out of GEF funds. As decided in the 3rd meeting of PSC held on 14.12.2010, upto 25 % of the total investment support to be sanctioned for setting

Fund Flow arrangements

accurate reporting of expenditure and providing a clear audit trail. Any interest accrued on the project funds will be ploughed back into the approved work plan at the request of the National Project Director or a designated authority in the form of duly filled and signed 'Fund Authorization and Certificate of Expenditures' Report (FACE-Report). Separate books of account shall be maintained in order to ensure Project Coordinator, IREDA (Indian Renewable Energy Development Agency). UNDP will advance the funds on a quarterly basis as per the At the request of the National Project Director, UNDP will release payments directly to the separate Project Account opened by National

Bank account number:

62034166749

Bank Name:

Branch:

State Bank of Hyderabad

IHC, Lodhi Road Branch, New Delhi

INTER OFFICE MEMORANDUM

To

Ms. Caitlin Wiesen

Resident Representative a.i.

Date:30 August 2011

Through:

Step 1: MSU after reviewing Atlas, Budgets and approving Implementing Modalities

Step 2: DCD- Programme for certification

From:

Subject:

Approval of revised AWP for GEF Biomas project

Please find enclosed the revised Annual Workplan of the GEF supported project- on Removal of Barriers to Biomass Power Generation in India, for your review and approval. The AWP has been revised at the request of the partner. Detailed Note to File dated 4 August 2011 is attached.

Thanks and regards

NOTE TO FILE

(Revision of AWP 2011) REMOVAL OF BARRIERS TO BIOMASS POWER GENERATION IN INDIA (Sept 2006-Dec 2012)

Annual Work Plan 2011 was made for 1,508,950 USD. This was ambitious and much higher than the previous years. During the year (2011), most activities are on track except implementation of Model Implementation Project (MIP). MIP is actually providing implementation support to projects that establish biomass based power generating units which are innovative in nature, and can provide lessons for replications. The process of procuring required approvals to set up a MIP was envisaged to take about three months after the Detailed Project Report of the promoter of MIP was approved by MNRE. However, it was realized by the project team that there are about nine approvals required to be taken (clearances from State Nodal Agency, State Pollution Control Board, State Electricity Board, etc.) to implement a biomass power project even of capacity of 1 to 2 MW. Apart from these, the promoters also need to enter into long term agreements with farmers/fuel suppliers for supply of biomass, and PPA (Power Purchase Agreements) with industry/end user to sell electricity. All these processes are taking about eight to ten months time. MNRE is keen to address issue of approvals at least for the category of 1 to 2 MW and has held several consultations with some of the relevant agencies. However, till some reliefs are formulated and approved, the projects currently under consideration need to pass through existing approval processes. The major revisions in budgets sought are due to delay in MIPs and one of the components being passed on to MNRE budget. The details are given in table below;

| SN | Outcome | AWP 2011 (in USD) | AWP 2011 (revised) (in USD) | Reasons for reduction |
|----|-------------------------|----------------------|-----------------------------------|---|
| 1 | Technology improvements | 130,000 | 20,000 | Establishment of test centers has been taken up by MNRE funds |
| 2 | MIPs | 1,000,000 | 600,000 | Major revision |
| | Total | 1,130,000 | 620,000 | |

Several consultations were held during June/July with NPC and NPD to review progress of project. Several options to expedite the activities were reviewed. After careful consideration after these consultations, MNRE felt that the target set is ambitious and it may not be possible to achieve this target. Hence the target was reduced from 1,508,950 USD to 850,950 USD. Given the above reasoning, we feel the revised budget of 850,950 USD for year 2011, may kindly be approved.

S. N. SRINIVAS

S.N. Soins

4 August 2011

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नवीन और नवीकरणीय ऊर्जा मंत्रालय

Government of India

MINISTRY OF NEW AND RENEWABLE ENERGY

ब्लाक नं. 14, केन्द्रीय कार्यालय परिसर, लोदी रोड़, नई दिल्ली-110003 BLOCK NO. 14, C.G.O. COMPLEX, LODI ROAD, NEW DELHI - 110 003

सं. No.

F. No- 11/5/PMC/BM/2009

दिनांक29.08.2011

Telegram: RENEWABLE

Sop - 13985634) Fax : 011-24361298

Dated

Dr. SN Srinivas Programme Officer Energy & Environment Unit United Nations Development Programme (UNDP) 55 Lodhi Estate, New Delhi-110003

Subject: Annual Work Plan for the Year 2011 - Revision of Budget- Reg.

Dear Sir.

Revised budget for the Annual Work Plan (AWP) for the Year 2011 in respect of UNDP/GEF assisted Biomass Power Project duly signed by the NPD is sent herewith.

2. You are requested to kindly get it signed on behalf of UNDP and return the same for

3 0 AUG 2011

our records.

Yours faithfully,

(V.K. Jain) Director & NPC

Telefax: 011-24369788

Email: jainvk@nic.in