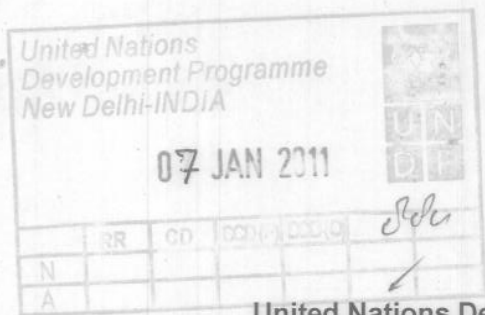


C-226427



**United Nations Development Programme – INDIA  
CPAP 2008-2012  
Annual Work Plan 2011 (January - December)**



Project Title: Energy conservation in small sector tea processing units in south India  
Award ID: 00047624  
Project ID: 00057404  
Project Start and end date: 2008-2012

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
1. Awareness about energy efficiency / renewable energy technologies of relevance to tea units and implications of their adoption	<p>Avenues for demonstration of select energy efficient technology options in tea factories created and site visits to these factories organized</p> <p>Meetings seminars interaction meets with energy consultants, equipment suppliers organized</p> <p>Project reaches out to all tea factories</p>	<p>The project has reached out to all tea factories in south India with awareness programmes energy efficiency, renewable energy and sustainable biomass cultivation</p> <p>Awareness programme leading to investment in energy efficient interventions signifying the acceptance of project recommendations</p> <p>The mid term review of the project commends the project team for good awareness creation</p>
2. Institutionalized mechanism for knowledge creation and management	<p>Data on performance of energy efficient technology demonstrated, collected and made available in the project office</p> <p>Project identifies and supports institutions like Tea Research Foundation to be the repository of</p>	<p>Preliminary and about 70 detailed energy audits generate adequate data for energy planning</p> <p>UPASI energy service facility offers facilities for knowledge creation to the factories but itself needs to</p>

	<p>knowledge created</p> <p>Structured format for data collection and monitoring with data on CO2 abated</p>	<p>develop more capacity for knowledge management.</p> <p>Fuel labs in 4 tea growing regions enable factories to participate in knowledge creation</p> <p>Data being maintained in a structured format. But mid-term review recommends up-gradation of the same and engagement of an international consultant</p>
<p>3. Institutionalization of commercial lending for investment in energy efficiency / renewable energy equipment (EE/RE)</p>	<p>Biannual data collection on lending to tea factories for energy efficient equipment by commercial financial institutions</p>	<p>Financial data on pattern of investment in EE equipment obtained.</p> <p>All commercial banks willing to lend for energy efficient equipment to the tea sector but factories prefer an equity investment</p> <p>Thermax offers a differed payment option for the high cost hot water generator on a pilot basis.</p> <p>The PSC recommends payment of subsidy for energy efficient equipment through bank after the bank sanctions the loan to reduce the interest burden of the tea factory</p>
<p>4. Development and operationalization of the risk insurance scheme</p>	<p>Risk insurance scheme evolved and implemented</p> <p>Measurement of the extent of risk insurance scheme in the third year</p>	<p>The project team begins implementation of the recommendations of the risk report.</p> <p>Risk mitigation options for briquette making and hot water generator announced</p>
<p>5. Nurturing the market</p>	<p>Listing of the energy efficiency</p>	<p>The project creates the</p>

driven establishment offering all components of energy services to the target sector	services and equipment promoted by the project  Definition of the market driven establishment and its business plan  Extent of physical and financial support offered to tea factories, equipment suppliers	linkage between the tea factories and equipment suppliers. EE equipment sold through this mechanism. However project support still required as a confidence building measure.  Project activities stimulate more potential linkages with renewable energy equipment suppliers
6. Capacity building of agencies involved to replicate energy efficiency projects in other areas and sectors	Tea Board initiates visits / interaction meets to project sites to other tea processing clusters  Number of projects / publications on energy efficiency that TIDE is implementing from the third year onwards	Capacity of UPASI, Tea Board, bought leaf association and TIDE significantly enhanced.  MNRE also understands energy issues relating to the tea industry and seeks recommendations for RE intervention.
7. Project Management Unit		

**Project and AWP 2010 BUDGET:**

UNDP funds	Government funds	Donor funds	Total
950000 (GEF)	240625	859375 (factories and banks)	USD 2,050,000 (for entire project duration)
260,700 (GEF)	*	**	USD 260,700 (for 2011) (GEF)

\*US \$75,000 GOI co-funding

\*\*US \$250,000 co-funding by factories and banks.

Project budget	Actual exp in 2008	Actual exp in 2009	Actual exp in 2010	Budget 2011	Budget 2012
950,000	204,885	141,707	245,000	260,700	97,708

Agreed by (Implementing Partner):



आर. अम्बालवानन. आई ए ए एस  
R. AMBALAVANAN, IAAS  
कार्यपालक निदेशक  
Executive Director  
टी. बोर्ड. कोनूर  
Tea Board, Coonoor

Agreed by UNDP:

S.N. Srinivas  
OIC 30.12.2010

Project Targets for 2011 <i>Remember to ensure that targets are 'SMART'</i>	PLANNED ACTIVITIES <i>Remember to add M&amp;E activities and procurement activities, as applicable</i>	Indicative month of completion	RESPONSIBLE PARTY (where possible)	Budget (USD)
<b>Target 1</b> <b>Awareness about energy efficiency / renewable energy technologies of relevance to tea units and implications of their adoption</b>  -Focus on awareness creation for RE technologies like hydro and wind - Produce a film on project processes -Exchange visits between tea factories in north east and south India - Website updated 4 times - 4 issues of newsletter printed	Awareness meeting on wind energy	Jan 2011	TIDE, C-WET	3300
	Awareness meeting on hydro power	April 2011	TIDE TEDA	3300
	Exchange visits between NE and south India tea factories	To coincide with UPASI meeting or ITTF	TIDE Tea Board Tea Research Association, Jorhat	11100
	Film on project processes and outputs	Nov 2011	TIDE, Film maker to be identified	17800
	Web site updated every quarter	ongoing	TIDE	2200
	Newsletter published and circulated	ongoing	TIDE	4400
<b>Total</b>				42100
<b>Target 2 for 2011</b> <b>Institutionalized mechanism for knowledge creation and management</b>  - Establishment of standard, internationally	Identification and award of international consultancy for measuring energy savings	June 2011	TIDE	11100
	Completion and circulation of the video tutorial on energy efficiency	June 2011	TIDE Film maker to be identified	2200

<p>recognised protocols for energy saving</p> <ul style="list-style-type: none"> <li>- Creation and launch of a training video on energy efficiency</li> <li>- UPASI energy service facility augmented to include an energy information centre</li> <li>- Creation and launch of a publication on analysis of data from 100 energy audits</li> <li>- preparation of 30 TIDE technical reports</li> <li>- creation of a facility for video counselling on energy issues</li> </ul>	<p>Technical support provided to UPASI energy service center to enable it to offer additional energy information services to the sector</p>	On going	TIDE UPASI	4400
	<p>Creation and launch of a publication of analysis from 100 energy audits</p>	September 2011	TIDE Tea Board	4400
	<p>Preparation of 30 more TIDE technical reports and their uploading on the web site</p>	Ongoing through the year	TIDE	5600
	<p>Video conferencing facility established and video counselling on energy issues commences</p>	December 2011	TIDE, UPASI and external consultant	7800
<b>Total</b>				<b>35500</b>
<p><b>Target 3 for 2010 Institutionalization of commercial lending for investment in energy efficiency / renewable energy equipment</b></p> <ul style="list-style-type: none"> <li>- data collection on pattern of financing for energy</li> <li>- Tea Board subsidy through bank finance</li> <li>- investment scheme for thermal energy becomes operational</li> <li>- Streamline procedures for subsidy for hydro power</li> <li>- adoption of energy</li> </ul>	<p>Data collection on pattern on financing by tea factories for EE /RE</p>	March 2011	TIDE External consultant	4400
	<p>Working with the Tea Board so that it creates an additional option of release of subsidy through bank as advance to reduce the interest burden on factories</p>	October 2011	Tea Board	1100
	<p>Offer technical and financial advisory services to the tea sector leading to adoption of energy measures by 100 factories</p>	December 2011	TIDE, Tea factories	2200
	<p>Consulting assignment to assess delivery of project targets on CO2 emission reduction</p>	October 2011	TIDE Tea factories	1100

measures by 100 factories - completion of CO2 emission targets	Motivating equipment suppliers and commercial lending institutions to together evolve an investment scheme for thermal energy equipment	October 2011	TIDE, Equipment supplier Financial institution	2200
	Providing assistance to the tea industries to interact with govt. depts for streamlining procedures for subsidy for hydro power in the three south Indian states	December 2011	TIDE, Tea Board TEDA	1100
<b>Total</b>				<b>12100</b>
Target 4 for 2010 <b>Development and operationalization of the risk insurance scheme</b> -Motivating 4 more tea factories in new locations to create - announcement of two more risk mitigation options and their adoption -Demonstration of Voltage stabilizer usage for factories disadvantaged because of low voltage due to their location -Demonstration of a solar facility after obtaining consensus from tea factories -Development of the end of project scenario and its adoption	Providing technical assistance to tea factories for setting up fuel labs. Providing information to the sector on the operation of the first few labs	September 2010	TIDE, Tea Factories	7800
	Working with the sector to evolve and announce of two risk mitigation options and their adoption	June and Dec 2011	TIDE, Tea Board, financial consultant	8900
	Awarding consulting assignments for assessing the need for voltage stabilizers in low voltage regions	August 2011	TIDE, Tea Factories, EB Tamil Nadu	2200
	Awarding a technical consulting assignment for developing designs of solar sheds and data collection from one demonstration shed Popularizing solar water heaters for cleaning of CTC machines	March 2011	TIDE, tea factory, solar consultant	3300
	Stakeholder consultations to evolve and document end of project scenario	June 2011	TIDE, Tea Board UPASI	2200
<b>Total</b>				<b>24400</b>

<p><b>Target 5 for 2010</b>  <b>Nurturing the market driven establishment offering all components of energy services to the target sector</b></p> <p>- 5 equipment suppliers have agencies or representatives in the project area.  - All energy equipment suppliers listed in the Tea Board subsidy scheme  - Equipment suppliers offer better terms for warranty, after sales service and annual maintenance contracts</p>	Project team works with at least 5 equipment suppliers and motivates them to have agencies or representatives in the project area who would work there even after completion of the project	June 2011	TIDE, Equipment suppliers, Bought leaf association	33300
	Work with the Tea Board so that all energy equipment suppliers listed in the Tea Board subsidy scheme	Dec 2011	TIDE, Tea Board	11100
	Conduct meetings and awareness for equipment suppliers so that they offer better terms for warranty, after sales service and annual maintenance contracts to the sector	Sept 2011	TIDE, equipment suppliers, industry associations	55600
<b>Total</b>				<b>100000</b>
<p><b>Target 6 for 2010</b>  <b>Capacity building of agencies involved to replicate energy efficiency projects in other areas and sectors</b></p> <p>-Training programme for TIDE staff and interested tea factories on financial analysis for energy interventions  -study tour exchange</p>	Training programme for TIDE staff and interested tea factories on financial analysis for energy interventions	Jan 2011	TIDE, tea factories, financial consultant	6700
	study tour exchange of best practices for project team and UPASI on energy related issues to Sri Lanka / Kenya	At a convenient time	TIDE, UPASI, external agency	15600
	Evolve alternate approaches to reduce dependency of the sector on project personnel	On going	TIDE, Tea Board, UPASI, bought leaf association	6700

of best practices for project team and UPASI on energy related issues to Sri Lanka / Kenya - Actions for phased withdrawal of project personnel from intensive mentoring				
<b>Total</b>				29000
Target 7 for 2010 Project Management Unit	PMU			10000
<b>Total</b>				10000
<b>Total</b>				253100
<b>ISS</b>				
<b>Communication, M&amp;E, Audit</b>				7,600
<b>AWP Grand Total in USD</b>				260700

**Notes:**

- Targets (derived from project outputs and indicators) are those which will be uploaded in the 2010 Development Work-plan (ERBM) against relevant indicators/outputs which will remain the same as 2009. Please refer to the 2009 Development work plan on ERBM.
- You can add as many targets as you want.
- Responsible parties may also include: contractors, consultants, institutions, etc.