

United Nations Development Programme Country: Egypt Project Document

UNDAF Outcome(s): By 2011, regional human development disparities are reduced, including reducing the gender gap. and environmental sustainability improved. Expected CPAP Outcome(s): Sustainable management of environment and natural resources incorporated into poverty reduction strategies/ key national development frameworks and sector strategies Expected CPAP/Project Output(s): HCFC-141b use phased-out and replaced by either methyl formate, or n-pentane in PU insulation foam production in four beneficiary companies. Egyptian Environmental Affairs Agency (EEAA) Implementing partner:

Brief Description

Responsible Parties:

Ministry of State for Environmental Affairs

Under this project, four enterprises in Egypt, namely Cairo Foam, MOG, FRESH and SECC, will phase-out the use of HCFC-141b in its PU insulation foam production. The project includes either replacement of the foam dispensers, or retrofitting of the existing dispensers in the enterprises' premises and various supporting activities.

IMPACT OF THE PROJECT ON COUNTRY'S MONTREAL PROTOCOL OBLIGATIONS:

This project eliminates 37, 4 t ODP (340 t HCFC-141b) which will contribute to Egypt's efforts to fulfil its commitments under the Montreal Protocol and its amendments.

Programme Period: 2007-2011 PAC Meeting Date 27/03/2011	
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CPAP Programme Component: OUTPUT 5	Date 27/03/2011
•	dget: US\$1.479,000
Production in Total allocated resources:	1 resources:
Atlas Award ID: 00070404	protocol funds US\$1.479,000

Agreed by (Government)

Signature: B. Whali Date: 20/4/2011 Name: His Excellency Minister Plenipotentiary Bassem Khalil Director of International Cooperation MOFA Agreed by (Implementing Partner): Date: 20/4 2011 Name: Dr. Mawaheb Abou El-Azm Signature Chief Executive Officer Egyptian Environmental Affairs Agency (EEAA) Agreed by (UNDP): Date: 20/4/2011 Signature_ Name: Mr. Mounir Tabet Country Director.

Situation Analysis

Both the UNDAF and CPAP situation analyses estimate that environmental degradation and slow improvement of sustainable practices hinder the economic and human development of Egypt. Phasing out the use of Hydro chlorofluorocarbons (HCFC) is a key activity in reducing ozone depletion levels and thus enforcing environmental sustainability. This is in direct compliance with the UNDAF outcome 3 and the CPAP outcome 5.

Egypt reported a total HCFC consumption in 2009 of 5,964 tonnes (396 Ozone Depleting Potential (ODP) tonnes) of which 1,354.1 tonnes (133 ODP tonnes) was HCFC-141b used almost exclusively in the foam sector. At the estimated growth rate of 12% the consumption is expected to rise to 8,379 tonnes (557.2 ODP tonnes) of which over 1,700 tonnes (over 187 ODP tonnes). The forecast baseline HCFC consumption based on the reported consumption is 6,321.87 (420.20 ODP tonnes).

The objective of this project is to phase-out the use of HCFCs in the manufacture of rigid polyurethane insulation foam panels for refrigerator trucks and cold rooms at four Egyptian foam enterprises and, in this way, to contribute to the Egypt's compliance with the Montreal Protocol and its amendments while at the same time reducing the global warming effect that is inherent with the use of HCFC-141b by using ozone-friendly alternatives with zero contribution to global warming.

Project Strategy

Egypt is a Party to the Vienna Convention and the Montreal Protocol. It also ratified the London, Copenhagen and Montreal amendments. The country is fully committed to the phaseout of HCFCs and willing to take the lead in assessing and implementing new HCFC phaseout technologies, particularly in the foam sector—as it did for CFCs in 1992 when it submitted and completed the first foam sector investment projects ever under the MLF.

In the UNDAF strategy, UNDP Egypt has committed to working to reduce pollution levels through low emission technologies and cleaner production methods, as well as to work with the Government and private sector to strengthen their capacity to comply with international environmental conventions. Through this project the UNDP aims to enforce sustainable environmental development by directly reducing pollution levels, and by building an environmental success story for the Egyptian government and industry to model future development on. The project will also strengthen the cooperation between government and private sector industries, building a stronger base for other activities related to environmental protection and sustainability.

In view of the limited time available to complete the investment projects to meet the HCFC consumption freeze and 10% reduction obligations in 2013 and 2015 respectively it became necessary for Egypt to adopt measures to facilitate a more rapid phase-out. Consequently Egypt has invited two implementing agencies to assist in the phase-out of HCFCs in the foam sector, UNDP and UNIDO. To this end all applications of HCFC-141b in the foam sector have been loosely grouped into two main categories, namely "*appliance*" and "*non-appliance*" foam and respective responsibility for their phase-out assigned to the two implementing agencies as follows:

- UNIDO, the lead agency will be the implementing agency for the phase-out of HCFC consumption in appliance foam applications;
- UNDP as supporting agency will be the implementing agency for the phase-out of HCFC consumption in the non-appliance foam applications.

Project Results:

The project will contribute to UNDP's CPAP Environment Outcome: Sustainable management of environment and natural resources incorporated into poverty reduction strategies/ key national development frameworks and sector strategies. The specific project outcome is to reduce HCFC emissions in Egypt in

compliance with the Montreal Protocol and meeting the set reduction goals for ozone depleting substance emissions.

To accomplish this outcome the project will focus on one output: phasing out HCFC-141b use and replacing it by either methyl formate, or n-pentane in PU insulation foam production in four beneficiary enterprises. The output will be accomplished through the implementation of a number of activity results, namely:

1. The installation of new machinery installed (or old machines retrofitted) in four target enterprises, geared for using new chemicals.

2. The discontinuation of the use of ozone depleting HCFC-141b in enterprises and replaced by methyl formate or n-pentane, which are ozone friendly substances with low global warming effect.

The four target enterprises in Egypt are the following:

Cairo Foam October (Cairo Foam) is a panel manufacturer serving the cold room and refrigerated truck market in Egypt. The company was founded in 1993 in Giza and moved in 1996 to a facility in 6th of October City. By now it has also outgrown this facility and provisionally added space by purchasing/leasing other, neighboring facilities. A new, consolidated facility is planned and will be ready by the time of project implementation.

Cairo Foam intends to convert its foam operation from the current use of HCFC-141b to n-pentane. The conversion plan to n-pentane includes

- Replacement of the existing dispenser.
- Installation of a premixing system;
- Installation of an HC gas monitoring and early warning system;
- Explosion proofing of the foam production area;
- Electrical grounding of all equipment;
- Installation of process emission exhaust;
- Civil works;
- System optimization (adhesion, flowability, reaction time) trials and training;
- A comprehensive safety audit.

FRESH is a major manufacturer of household appliances such as cooking ranges, washing machines, fans and water heaters. For the manufacture of electric water heaters it has a dedicated plant with three production lines, each equipped with a dedicated foaming unit. The company was founded 1993 and has 500 employees. FRESH intends to convert its foam operation from the current use of HCFC-141b to methyl formate. As it is in the process of installing new water heater capacity in Georgia, and would like to avoid the use of HCFCs in the new operations, it wants to proceed quickly with this change of technology. The conversion plan includes

- Retrofit of the existing dispensers to make these corrosion resistant;
- Trials and training;
- A comprehensive industrial hygienic audit.

SECC intends to convert its sprayfoam operations from the current use of HCFC-141b to methyl formate. As many of its customers are inquiring for zero ODP/low GWP options, it is interested to go ahead in the first batch of projects in Egypt. The project requires

- Retrofit of the existing dispensers to make these corrosion resistant;
- Trials and training;
- A comprehensive industrial hygienic audit.

MOG for Engineering and Industry (MOG) operates since 1999 and produces panels for cold rooms and prefab units. It is one of the largest panel manufacturers in Egypt. The company is a first conversion. MOG intends to convert its panel operations from the current use of HCFC-141b to n-pentane. The conversion plan includes

- Retrofit of the existing high-pressure dispensers to make them explosion proof. The company would, however, be allowed to replace the equipment and apply the retrofit funds towards this;
- Replacement of the low-pressure dispensers;
- Installation of a premixing system;
- Installation of an HC monitoring and early warning system;
- Explosion proofing of the foam production area;
- Electrical grounding of all equipment;
- Installation of process emission exhaust;
- System optimization (adhesion, flowability, reaction time), trials and training;
- A comprehensive safety audit.

The results of the project will be monitored through indicators named in the Results and Resources Framework.

Risk Analysis (Risk Log in Annex I)

Risks in this project relate mostly to the installation of the machines:

- Problems in delivery will delay the installation, causing delays and losses to the receiving enterprise
- Receiving enterprise not prepared for installation, causes delays to the project and extra storing costs
- Damage to machine during transport/installation
- Physical injuries to transport/installation staff
- Unstable political situation may cause delays with imports and other regulation
- Explosion/fire due to flammable liquids

Communication Activities

The communication of the results of this project is done through information dissemination and knowledge sharing activities such as international workshops, thereby informing the stakeholders of the process and benefits in phasing-out the use of HCFCs, as well as direct feedback with the beneficiary companies assessing individually their progress towards the goals of the project. The audience for communication activities comprises the beneficiary companies, as well as other prospective beneficiaries in the industry who are keen to know the results of the project. Also system houses in Egypt, who will support smaller companies in similar transitions, are an obvious audience for hearing experiences and results from the project. Communicating the results to non-stakeholder organizations will be done via reports and briefings.

Results and Resources Framework

Intended Outcome as stated in the Country Programme Action Plan (CPAP):

Sustainable management of environment and natural resources incorporated into poverty reduction strategies/ key national development frameworks and sector strategies

Outcome indicators as stated in the Country Programme Action Plan (CPAP) Results and Resources Framework, including baseline and targets:

Rate/amount of HCFC-141b use in Egypt. **Baseline**: Egyptian baseline consumption of HCFCs is 420.40 t ODP (2009, subject to revision at the beginning of the project); **Target under the Montreal Protocol**: Zero t by 2030

Rate/amount of ozone depleting emissions in the PU foam sector in Egypt; Baseline: 132,99 t ODP Target: Ozone depleting emissions reduced by 37,4 t ODP

Progress towards meeting the national commitments under the Montreal Protocol. **Target**: Reduction of HCFC consumption by 10% by 2015 **Progress:** This project will reduce Egypt's HCFC ODP by 8,89%

Applicable Strategic Plan Focus Area: Managing energy and environment for sustainable development

Partnership Strategy: Strengthen partnership with EEAA, Private sector working with HCFCs and System Houses

Project title and ID (ATLAS Award ID): Phase-out of HCFC-141b in the Manufacture of Polyurethane Rigid Insulation Foam in four Egyptian enterprises (00078164)

INTENDED OUTPUTS	OUTPUT TARGETS FOR (2012)	INDICATIVE ACTIVITIES	RESPONSIBLE PARTIES	INPUTS
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 Output: HCFC-141b use phased- out and replaced by either methyl formate, or n-pentane in PU insulation foam production in four beneficiary enterprises Baseline: The four target enterprises' HCFC-141b use remains at their current level, with old technology in place. Indicators: 1 New machinery installed (or old machines retrofitted) in the four target enterprises 2 Use of HCFC-141b discontinued in enterprises and replaced by methyl formate or n-pentane 3 Necessary old machine parts destroyed to prevent return to HCFC use 4 National imports of HCFCs monitored to double check phase-out has happened 	 New technology installed in target enterprises HCFC-141b – consumption phased out in target enterprises Targets (future) possible spinout projects in other PU-foam companies in Egypt 	 MOG - Conversion from HCFC- 141b to n-pentane in the Manufacture of Polyurethane Rigid Insulation Foam Panels Action: Hiring consultant Action: Installing of equipment (foam machinery and safety related installation) Action: Sub-contracts for constructing storage and transfer areas Action: Sub-contracts for trials and testing Action: Contingencies FRESH - Conversion from HCFC- 141b to methyl formate in the Manufacture of Polyurethane Rigid Insulation Foam for Water Heaters Action: Hiring consultant Action: HDD Retrofitting of machinery Action: Sub contracts for trials Action: Sub contracts for trials Action: Sub contracts for trials Action: HDP Retrofitting of machinery Action: Sub contracts for trials Action: Contingencies SECC - Conversion from HCFC- 141b to methyl formate in the Manufacture of PU Spray Foams Action: Hiring consultant Action: Sub contracts for trials Action: Hiring consultant Action: Sub contracts for material purchase (polyol isocianate, methyl formate) Action: Sub contracts for trials Action: Sub contracts for material purchase (polyol isocianate, methyl formate) Action: Sub contracts for trials Action: Contingencies 	 EEAA and UNDP EEAA and UNDP EEAA and UNDP EEAA and UNDP 	 MOG - Conversion from HCFC-141b to n-pentane in the Manufacture of Polyurethane Rigid Insulation Foam Panels = \$790,400 FRESH - Conversion from HCFC-141b to methyl formate in the Manufacture of Polyurethane Rigid Insulation Foam for Water Heaters = \$124,500 SECC - Conversion from HCFC-141b to methyl formate in the Manufacture of PU Spray Foams = \$178,000 CAIRO FOAM - Conversion from HCFC-141b to n- pentane in the Manufacture of Polyurethane Rigid Insulation Foam Panels = \$386,100
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4 CAIRO FOAM - Conversion from HCFC-141b to n-pentane in the Manufacture of Polyurethane Rigid Insulation Foam Panels	
 Action: Hiring consultant Action: Installing of equipment (foam machinery and safety related installation) Action: Sub-contracts for constructing storage and transfer areas Action: Sub contracts for trials and 	
 Action: Sub contracts for thats and testing Action: Contingencies 	

Annual Work Plan

Year: April 2011 – September 2012

EXPECTED OUTPUTS	PLANNED ACTIVITIES		TIMEF	RAME			P	LANNED BUDGET	
And baseline, indicators including annual targets	List activity results and associated actions	Q1	Q2	Q3	Q4	RESPONSIBLE PARTY	Funding Source	Budget Description	Amount
Output:HCFC-141busephased-outandreplacedbyeithermethylformateorpentanein PUinsulationfoamproductioninfourbeneficiaryenterprisesBaseline:ThefourBaseline:Thefourtargetenterprises'HCFC-141buseremainsat theircurrentlevel,witholdtechnology in place.Indicators:1New machinery installed (or old machines retrofitted) in the four target enterprises2Use ofHCFC-141b discontinued in enterprises and replaced	 MOG - Conversion from HCFC-141b to n-pentane in the Manufacture of Polyurethane Rigid Insulation Foam Panels Action: Hiring consultant Action: Installing of equipment (foam machinery and safety related machinery) Action: Sub-contracts for constructing storage and transfer areas Action: Sub contracts for trials and testing Action: Contingencies 	x		x x x	x	EEAA and UNDP	Montreal Protocol	Action: Hiring consultant Action: Installing of equipment (foam machinery and safety related machinery) Action: Sub- contracts for constructing storage and transfer areas Action: Sub contracts for trials and testing Action: Contingencies	\$40,000 \$670,000 \$35,000 \$15,000 \$30,400

 by methyl formate or n-pentane 3 Necessary old machine parts destroyed to prevent return to HCFC use 4 National imports of HCFCs monitored to double check phase-out has happened 	 2 FRESH - Conversion from HCFC-141b to methyl formate in the Manufacture of Polyurethane Rigid Insulation Foam for Water Heaters Action: Hiring consultant Action: HPD Retrofitting of machinery Action: Sub contracts for trials Action: Sub contracts for material purchase (polyol isocianate, methyl formate) Action: Contingencies 	x	x x x	x	EEAA and UNDP	Montreal Protocol	Action: Hiring consultant Action: HPD Retrofitting of machinery Action: Sub contracts for trials Action: Sub contracts for material purchase (polyol isocianate, methyl formate) Action: Contingencies	\$25,000 \$45,000 \$15,000 \$31,000 \$8,500
	 3 SECC - Conversion from HCFC-141b to methyl formate in the Manufacture of PU Spray Foams Action: Hiring consultant Action: SPD Retrofitting of machinery Action: Sub contracts for trials Action: Sub contracts for material purchase (polyol isocianate, methyl formate) Action: Contingencies 	x	x x x	x	EEAA and UNDP	Montreal Protocol	Action: Hiring consultant Action: SPD Retrofitting of machinery Action: Sub contracts for trials Action: Sub contracts for material purchase (polyol isocianate, methyl formate) Action: Contingencies	\$25,000 \$25,000 \$45,000 \$73,500 \$9,500

							Action: Hiring consultant	\$40,000
	4 CAIRO FOAM - Conversion from HCFC- 141b to n-pentane in the Manufacture of Polyurethane Rigid Insulation Foam Panels						Action: Installing of equipment (foam machinery and safety related machinery)	\$291,000
	 Action: Hiring consultant Action: Installing of equipment (foam machinery and safety related machinery) 	х		x	EEAA and UNDP	Montreal Protocol	Action: Sub- contracts for	\$25,000
	 Action: Sub-contracts for constructing storage and transfer areas 			x			constructing storage and transfer areas	
	 Action: Sub contracts for trials and testing Action: Contingencies 			x			Action: Sub contracts for	\$15,000
	- Adion. Contingencies						trials and testing	
							Contingencies	\$15,100
OTAL	******************		88888	<u> </u>	<u> </u>	*********		\$1.479,00

Management Arrangements

Project Board: A Project Board will be established to take executive management decisions and to provide guidance to the Project Manager, including approval of project revisions and of the project's annual workplan. Project assurance reviews by this group are made at designated decision points during the running of the project, or as necessary when raised by the Project Manager. The Board contains three roles: an Executive to chair the group, a Senior Supplier to provide guidance regarding the technical feasibility of the project, and a Senior Beneficiary to ensure realization of project benefits from the perspective of project beneficiaries. This group is consulted by the Project Manager for decisions when PM tolerances (i.e. constraints normally in terms of time and budget) have been exceeded.

Potential members of the Project Board are reviewed and recommended for approval during the Programme Advisory Committee (PAC) meeting.

The Group will meet annually (or more frequently if necessary) and will be composed of:

Chairman (Executive): Ministry of State for Environmental Affairs

- Senior Supplier: EEAA
- Senior Beneficiary: Named Contact Persons in each of the four target enterprises
- Representatives from Participating donor agencies in the project: UNDP

Ex officio: The Project Manager and/or Coordinator

Minutes: The Project Manager/Coordinator will act as secretariat for the committee, being responsible for convening the meetings, preparing the agenda, overseeing preparation of materials for presentation to the meeting and for preparing and distributing minutes of the meetings.

<u>Project Assurance</u> is the responsibility of each Project Board member, but the role can be delegated. The Project Assurance role will support the Project Board by carrying out objective and independent project oversight and monitoring functions. This role of the Project Assurance ensures appropriate project management milestones are managed and completed. UNDP is responsible for designating a person to provide this oversight, which is mandatory for all projects.

Project Manager: The Project Manager has the authority to run the project on a day-to-day basis on behalf of the Project Board within the constraints laid down by the Project Board. The Project Manager is responsible for day-to-day management and decision-making for the project. The Project Manager's prime responsibility is to ensure that the project produces the results specified in the project document, to the required standard of quality and within the specified constraints of time and cost. The Project manager will be responsible for coordinating the implementation of all project activities, developing action plans and reporting progress to UNDP. He/she will also be responsible for coordinating, networking and soliciting the participation of all concerned. The Project Manager will be responsible for regular progress reports, identifying bottlenecks and suggesting corrective measures when necessary. The Project Manager is appointed jointly by the UNDP and the Implementing Partner.

Project Support:

The Project Support will provide project administration and management support to the Project Manager as required by the needs of the project or Project Manager.

Audit Arrangements:

The project is subject to financial audit according to UNDP rules and regulations. The project will be charged for the audit fee.

Financial Arrangements

UNDP shall receive and administer the payments to beneficiary companies and other stakeholders in accordance with the regulations, rules and directives of UNDP.

All financial accounts and statements shall be expressed in United States dollars.

In accordance with the decisions and directives of UNDP's Executive Board:

The contribution shall be charged:

- (a) [7.5%] Implementing Agency Support Cost for the provision of general management support (GMS) by UNDP headquarters and country offices
- (b) Direct cost for implementation support services (ISS) provided by UNDP and/or an executing entity/implementing partner.

Ownership of equipment, supplies and other properties financed from the contribution shall vest in UNDP. Matters relating to the transfer of ownership by UNDP shall be determined in accordance with the relevant policies and procedures of UNDP.

The contribution shall be subject exclusively to the internal and external auditing procedures provided for in the financial regulations, rules and directives of UNDP.

Monitoring Framework and Evaluation

In accordance with the programming policies and procedures outlined in the UNDP User Guide, the project will be monitored through the following:

Within the annual cycle

- On a quarterly basis, a quality assessment shall record progress towards the completion of key results, based on quality criteria and methods captured in UNDP Quality Management tables (to be completed following the signing of the project document).
- An Issue Log shall be activated in Atlas and updated by the Project Manager to facilitate tracking and resolution of potential problems or requests for change.
- Based on the initial risk analysis submitted (see annex 1), a risk log shall be activated in Atlas and regularly updated by reviewing the external environment that may affect the project implementation.
- Based on the above information recorded in Atlas, a Quarterly Progress Reports (QPR) shall be submitted by the Project Manager to the Project Board through Project Assurance, using the standard report format available in the Executive Snapshot.
- a project Lesson-learned log shall be activated and regularly updated to ensure on-going learning and adaptation within the organization, and to facilitate the preparation of the Lessons-learned Report at the end of the project
- a Monitoring Schedule Plan shall be activated in Atlas and updated to track key management actions/events

Annually

Annual Review Report. An Annual Review Report shall be prepared by the Project Manager and shared with the Project Board and the Outcome Board. As minimum requirement, the Annual Review Report shall consist of the Atlas standard format for the QPR covering the whole year with updated information for each above element of the QPR as well as a summary of results achieved against pre-defined annual targets at the output level.

Annual Project Review. Based on the above report, an annual project review shall be conducted during the fourth quarter of the year or soon after, to assess the performance of the project and appraise the Annual Work Plan (AWP) for the following year. In the last year, this review will be a final assessment. This review is driven by the Project Board and may involve other stakeholders as required. It shall focus on the extent to which progress is being made towards outputs, and that these remain aligned to appropriate outcomes.

Legal Context

This document together with the CPAP signed by the Government and UNDP which is incorporated by reference constitute together a Project Document as referred to in the SBAA [or other appropriate governing agreement] and all CPAP provisions apply to this document.

Consistent with the Article III of the Standard Basic Assistance Agreement, the responsibility for the safety and security of the implementing partner and its personnel and property, and of UNDP's property in the implementing partner's custody, rests with the implementing partner.

The implementing partner shall:

- a) put in place an appropriate security plan and maintain the security plan, taking into account the security situation in the country where the project is being carried;
- b) assume all risks and liabilities related to the implementing partner's security, and the full implementation of the security plan.

UNDP reserves the right to verify whether such a plan is in place, and to suggest modifications to the plan when necessary. Failure to maintain and implement an appropriate security plan as required hereunder shall be deemed a breach of this agreement.

The implementing partner agrees to undertake all reasonable efforts to ensure that none of the UNDP funds received pursuant to the Project Document are used to provide support to individuals or entities associated with terrorism and that the recipients of any amounts provided by UNDP hereunder do not appear on the list maintained by the Security Council Committee established pursuant to resolution 1267 (1999). The list can be accessed via http://www.un.org/Docs/sc/committees/1267/1267ListEng.htm. This provision must be included in all sub-contracts or sub-agreements entered into under this Project Document".

ANNEXES

Annex I.

OFFLINE RISK LOG							
Project Title:	Award ID:	Date:					
Phase-out of HCFCs in Foam Production in Egypt	00078164	27/03/2011					

#	Description	Date Identified	Туре	Impact & Probability	Countermeasures / Mngt response	Owner	Submitted, updated by	Last Update	Status
1	Problems in delivery will delay the installation, causing delays and losses to the receiving enterprise	In March 2011	Operational	Possible financial consequences for the project and the target enterprises. P = 4 I = 3	Monitor political and financial situation in the country to forecast hindrances. Monitor subcontractor performance.	Project Manager	UNDP	09/03/2011	No change
2	Explosion/fire due to flammable liquids	In March 2011	Operational	Damage to humans and infrastructure would severely delay, if not stop the project. P = 2 $I = 5$	Guide and monitor company handling of flammable liquids	Project Manager	UNDP	09/03/2011	No change
3	Receiving enterprise not prepared for installation, causes delays to the project and extra storing costs	In March 2011	Operational	Delays to project timescale and possibility to exceeding the budget P = 4 I = 2	Monitor receiving company progress and provide support.	Project Manager	UNDP	09/03/2011	No change
4	Damage to machine during transport/installation	In March 2011	Operational	Increasing costs, possibility to exceed the budget	Ensure subcontractor capability and reputability.	Project Manager	UNDP	09/03/2011	No change

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				P = 4 l = 3					
5	Physical injuries to transport/installation staff	In March 2011	Operational	Possible delays and post- implementation challenges.	Choice of subcontractors who ensure work safety.	Project Manager	UNDP	09/03/2011	No change
				P = 3 I = 1					
6	Unstable political situation may cause delays with imports and other regulation	In March 2011	Political	Unpredictable delay to the project, possible cancelling of the project.	Follow up of political situation, no possibility to prevent.	Project Manager	UNDP	09/03/2011	Increasing
				P = 3 I = 4					