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EXECUTIVE COMMITTEE OF  
THE MULTILATERAL FUND FOR THE  
IMPLEMENTATION OF THE MONTREAL PROTOCOL  
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**PROJECT PROPOSAL: INDIA**

This document consists of the comments and recommendations of the Fund Secretariat on the following project proposal:

Phase-out

- CTC phase-out for the consumption and production sectors: 2006 annual programme  
France, Germany  
Japan, World  
Bank, UNIDO

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## CTC PHASE-OUT FOR THE CONSUMPTION AND PRODUCTION SECTORS: 2006 ANNUAL PROGRAMME

### Project Description

1. The World Bank is submitting on behalf of the Government of India the 2006 annual work programme to the 49<sup>th</sup> Meeting and requesting the release of another US \$10,755,313 plus agency support cost of US \$889,148 to implement it. Different from the work programmes in previous years, the 2006 annual programme includes a verification of the achievement of the 2005 annual programme which is mandatory under the Agreement between the Government of India and the Executive Committee for releasing the 2006 funding. The proposed 2006 work programme includes an update on the implementation of the 2005 annual work programme and the specifics of the 2006 annual programme. Both the verification of the 2005 work programme and the 2006 work programme are attached.

### Background

2. At its 40<sup>th</sup> Meeting in July 2003, the Executive Committee decided to approve in principle a total of US \$52 million to assist India in complying with the Montreal Protocol control schedule for the production and consumption of carbon tetrachloride (CTC), and disbursed the first tranche of US \$5 million at the meeting to start implementation of the project. Further, at its 41<sup>st</sup> Meeting the Committee approved the Agreement for the phase-out in the consumption and production of CTC in India and disbursed the balance of US \$3,520,843 for the funding of the 2003 annual work programme. Subsequently the Executive Committee approved the 2004 and 2005 annual programmes and disbursed another US \$ 21,479,158 and brought the total cumulative disbursement to US\$30 million as of the end of 2005.

3. A summary of the CTC phase-out targets and funding tranches of the sector plan and the 2006 annual work programme is presented in Table 1:

Table 1

	Baseline <sup>1</sup>	2003	2004	2005	2006	2007	2008	2009	2010
1. Max allowable total consumption (ODP tonnes)	11,505	N/A	N/A	1,726	<b>1,147</b>	708	268	48	0
2. Max allowable total production (ODP tonnes) for this Agreement	11,553	N/A	N/A	1,726	<b>1,147</b>	708	268	48	-
3. WB agreed funding		8,520,843	9,180,112	399,045	<b>9,556,267</b>	4,020,938	3,211,875	3,211,874	-
4. WB support costs		639,063	688,508	29,928	<b>716,720</b>	301,570	240,891	240,891	-
5. France agreed funding		-	1,000,000	1,000,000	<b>500,000</b>	500,000	-	-	-
6. France support costs		-	85,000	85,000	<b>85,000</b>	85,000	-	-	-
7. Germany agreed funding		-	700,000	700,000	<b>300,000</b>	300,000	-	-	-
8. Germany support costs		-	57,500	57,500	<b>57,500</b>	57,500	-	-	-
9. Japan agreed funding		-	2,500,000	2,500,000	-	-	-	-	-
10. Japan support costs		-	280,000	280,000	-	-	-	-	-
11. UNIDO agreed funding				3,500,000	<b>399,046</b>				
12. UNIDO agreed support cost				262,500	<b>29,928</b>				
13. Total agreed funding (US \$)		8,520,843	13,380,112	8,099,045	<b>10,755,313</b>	4,820,938	3,211,875	3,211,874	
14. Total agency support costs (US \$)		639,063	1,111,008	714,928	<b>889,148</b>	444,070	240,891	240,891	
15. Total agreed costs (US \$)		9,159,906	14,491,120	8,813,973	<b>12,073,435</b>	5,265,008	3,452,766	3,452,765	

## **Verification of the 2005 work programme**

### The verification framework of the India CTC phase-out programme

4. In approving the Indian CTC phase-out Agreement at its 41<sup>st</sup> Meeting, the Executive Committee decided to request the World Bank and the Government of India to submit a draft verification framework for the CTC sector Agreement to the 42<sup>nd</sup> Meeting of the Executive Committee. Accordingly the World Bank submitted to the 43<sup>rd</sup> Meeting a verification framework, which proposed that the verification to be conducted by the Bank would be based on the Montreal Protocol definitions of production and consumption; would cover the total annual CTC production and imports, exports, and the breakdown of CTC production for feedstock and non-feedstock applications; and would include the checking and validation of records such as production logs, production ratios between product and its feedstock, names, quotas and quantity of imports, excise records and other related documents. The Executive Committee noted the submission by the World Bank.

### Verification of the 2005 work programme

5. The verification was carried out by a team of 4 in May 2006 from two Indian firms, ERM India Private Ltd., a firm specialized in environment auditing and environment risk assessment, and Mukund M Chitale & Company, a financial accounting and auditing firm. Both companies have extensive experience in their respective fields and ensure teams of qualified professionals.

6. The objectives of the verification were to confirm that the CTC production and consumption of controlled uses in 2005 had not exceeded the maximum allowable limits set in the Agreement, namely 1,726 ODP tonnes in each case. The methodology employed was to verify the CTC production and imports from the supply side, and deduct from total supply the CTC used as feedstock in the production of CFC and Dichloro Vinyl Acid Chloride (DVAC). The balance would represent the CTC consumption for non-feedstock uses controlled under the Montreal Protocol.

7. As a result, the team of auditors reviewed the records of:

- (a) Production of CTC by all 3 local producers;
- (b) Import of CTC by CTC users as well as one CTC producer;
- (c) Consumption of the locally procured and imported CTC by all feedstock users, including four CFC producers (two of the four CFC producers are also CTC producers) and eight DVAC producers;
- (d) CTC sale to non-feedstock users as per the annual quotas issued by the Ozone Cell;

- (e) Registrations of all CTC producers and feedstock users issued by the Ozone Cell, Ministry of Environment and Forests (MoEF). Since under the Environment Protection Act (1986) Ozone Depleting Substances (Regulation) Rules 2000 were established by the Government of India providing that no person shall produce or cause to produce ODS unless he/she is registered with the Ozone Cell, MoEF, all CTC producers and feedstock users have been registered with the Ozone Cell; and
- (f) Registration records, maintained by CTC producers, of all CTC buyers for non-feedstock use. However, since the methodology used was to determine the controlled use by confirming the supply and demand through verification of the levels of CTC production, import/export, and feedstock use, the team did not cover the non-feedstock uses.

8. Prior to visiting the industries, the verification team collected information through the Ozone Cell which forwarded a questionnaire to each CTC producer and feedstock user for completion prior to the site visits. The independent verification team also visited the CTC storage installations at Kandla in Gujarat, the only port where bulk CTC is imported, to assess the actual level of CTC imports and exports.

9. The verification procedures employed during site visits included, amongst others, the following steps:

- (a) Review of the record keeping system of each enterprise such as production logs, issue logs, and dispatch logs;
- (b) Review of the daily raw material consumption data and daily production records for CTC and other chloromethane production;
- (c) Verification of annual production, imports, and local procurement of CTC. This step entailed the following tasks:
  - (i) An initial round of a facility tour to familiarize with the plant layout, and to meet with the key personnel;
  - (ii) Verification of the data in the complete questionnaire completed by respective enterprises. This was carried out based on the documentary evidence called for by the independent verification team. The verification was done by cross-checking the data provided in the questionnaire against the production and excise records and also comprises of tracking these sets of data from the monthly records on a random basis;
  - (iii) In addition to the above store records comprising of ledgers, invoices, Goods Receipt Notes (GRN), issue slips, statutory excise records, records of imported consignments including weigh bridge documents, surveyor's certificate, and others, were reviewed; and

- (iv) Efficacy of the documents used for these verification purposes was also tested to the extent possible. For example, imported consignments were cross checked against the purchase orders, suppliers' invoices, and surveyors' out-turn reports;
- (d) Mass balance analyses were conducted for the production of CFCs during the CFC audits and for the production of DVAC. The purpose was to verify whether CTC consumption for these applications is within the known and available industry norms. The process involved:
  - (i) Sighting the documentary evidence of the consumption of the raw materials; and
  - (ii) Comparing the actual consumption with the theoretical (stoichiometric) requirement and the industry norms;
- (e) Verification of cumulative inventory changes of "key" raw material (chlorine), in case of CTC producers, whether they are consistent with the production level of CTC and co-products;
- (f) Verification of cumulative inventory changes for CTC, in case of CTC feedstock users, and for CFC producers and DVAC producers whether they are consistent with the levels of production of CFC and DVAC;
- (g) Verification of CTC destruction, if such activity is claimed by any producers or users; and
- (h) Verification of cumulative inventory changes of CTC in transit to ensure no diversion of CTC intended for feedstock applications to non-feedstock applications, to the extent they were made available for verification.

10. The World Bank submission includes a summary of the findings of the verification team at each of the 3 CTC producers, and each of the CTC feedstock users, including CFC producers and DVAC producers. The summary covering CTC producers describes the CTC production process and history of the plant, data on the CTC opening stock, imports, production, sale for feedstock uses, sale for non-feedstock uses against sales quota, and closing stock. It also provides data on the breakdown of the production levels of co-produced chloromethane products, methylene chloride (C2), chloroform (C3), CTC, the aggregate consumption of methane (methanol) and chlorine, and comment on the consumption ratio between such feedstock and CTC production.

11. The summary on CFC producers includes a history of the plant and information on the supply of raw materials, the production process, the consumption in 2005 of CTC and any issues that were identified. The description of each of the 8 DVAC producers includes the technology used, the data checked at the plant, gross CTC consumption data on opening stock, imports, domestic procurement, amount used for DVAC production and the closing stock.

12. The findings of the verification are as follows:

Table 2

**Gross CTC production in 2005**

CTC producer	Production in 2005 (MT)
SRF Limited	5,680
Chemplast	5,282
Gujarat Alkalies & Chemicals Limited (GACL)	6,471
Total	17,433

13. **CTC imports:** The verification team reports the CTC imports by 4 CFC producers and 8 DVAC producers in 2005 and the breakdown is as follows:

Table 3

**CTC imports in 2005**

Importer	Imports in 2005 (MT)
CFC producers	12,133
DVAC producers	3,512
Total	15,645

14. **Consumption of CTC for non-feedstock uses:** On the basis of the sales records of the 3 CTC producers, the verification team reported the quota and the actual sales of CTC for non-feedstock use by each of the three CTC producers to be as follows:

Table 4

**Quota and Actual Sale of CTC for Non-Feedstock Use (MT) in 2005**

	SRF Limited	CSL	GACL	Total
CY 2005 Quota (MT)	523.000	523.000	523.000	1,569.000
Actual Production for Non-Feedstock Sale (MT)	520.720	523.000	462.157	1,505.877

15. In addition to the above volumes, a quantity of CTC amounting to 241 mt was drawn by CSL from its stockpile. As per the Montreal Protocol definitions of “production” and “consumption”, this quantity sold by CSL does not constitute part of the CTC production and consumption in 2005. Therefore, the total sales for non-feedstock uses (or consumption) in 2005 was 1,747 mt less 241 mt from the stockpile, which is equal to 1,506 mt or 1,657 ODP tonnes. The actual production and sales for non-feedstock uses (or consumption) of 1,657 ODP tonnes, is well within the target of 1,726 ODP tonnes.

16. **Production and consumption of CTC as for the definitions of the Montreal Protocol:**  
The verification attempted to measure the CTC production and consumption according to the Montreal Protocol definitions and reports the following results:

Table 5

<b>Production</b>	<b>MT</b>
Gross Production	17,433
Quantity Used for Feedstock*	31,268
Quantity Used for VCM (Feedstock)	64
Production	(13,899)
<b>Consumption</b>	<b>MT</b>
Production	(13,899)
Import	15,646
CTC produced before 2005	(241)
Export	-
Consumption	1,506

\*The quantity used for feedstock included the quantity of CTC consumed by CFC and DVAC manufacturers in 2005 of 30,708 mt, plus the change in the inventory in 2005 from the production and imports amounting to 560 mt. This is based on the fact that CTC produced or imported but not used in 2005 will be used for feedstock purposes in the following years. Given the quota on non-feedstock sales established by the Ozone Cell, the unused quantity in 2005 and the change in the inventory in 2005 ( $7,614 - 7,054 = 560$  mt), will not be made available to the market for non-feedstock or controlled use.

### **Comments of the Secretariat on the 2005 verification report**

17. This is the first verification to be carried out under the India CTC phase-out plan. The World Bank and the Government of India made strong efforts to conduct the verification according to the verification framework, which had been reviewed and noted by the Executive Committee at its 43<sup>rd</sup> Meeting. The team that was contracted has the relevant expertise and extensive experience in their field.

18. The methodology used to confirm the CTC production and consumption in controlled uses consisted of verifying gross CTC production and imports, and the CTC use for feedstock seemed to be appropriate under the current Indian Government policy controls on CTC production, imports, consumption and distribution. CTC producers and feedstock users must be registered with the Government and are the only entities allowed to import CTC. CTC dealers and end-users are not allowed to import and can only purchase CTC from CTC producers who have a list of all the dealers and the major non-feedstock users. The Government determined that for the purpose of the verification sales from CTC producers to dealers and non-feedstock users were deemed to be non-feedstock uses even if the stock was subsequently diverted to feedstock use. One of the key objectives of the verification was to confirm that CTC imported and locally purchased by feedstock users had not been diverted to non-feedstock uses.

19. The results of the assessment by the verification team indicated that the production and consumption of CTC in 2005, in accordance with the Montreal Protocol definitions, were -15,288.9 ODP tonnes and (-13,899 mt) and 1,657 ODP tonnes (or 1,506 mt) respectively.

While the consumption level was close to the maximum allowable level under the Agreement of 1,726 ODP tonnes, the production level at -15,288.9 ODP tonnes is significantly different from the target of 1,726 ODP tonnes.

20. Moreover a number of questions can be raised regarding the interpretation by the verification of the definitions of production and consumption under the Montreal Protocol.

21. The first question relates to the level of production. In determining the 2005 level of production, the verification team has deducted from the gross level of production both the amount of local production for feedstock and the amount of CTC imported for feedstock purposes of 15,646 mt.

22. However the Secretariat understands that the Ozone Secretariat does not deduct the CTC imported for feedstock uses from CTC gross production in calculating CTC production for controlled uses because the purpose of the definition in the Protocol is to enable the level of production of CTC for controlled uses to be determined. Furthermore, since imports of CTC into India are not related to the production of CTC in the country, only the CTC which is locally produced for use as feedstock should be deducted from the gross production to arrive at the volume of CTC produced for controlled uses.

23. The second question relates to what should be counted as CTC imports in the calculation of consumption under the Montreal Protocol. The verification team understood that the CTC imported for feedstock use should be included in calculating CTC consumption and as a result the 15,646 mt of imports of CTC are included in the consumption figure for 2005.

24. However the Ozone Secretariat indicated that it is their practice in calculating CTC consumption under Article 7 of the Protocol to deduct from the total quantities reported as imports the amounts identified as being imported for feedstock uses. Since in the case of India, it has been verified that there were no CTC imports in 2005 for non-feedstock uses, all the imports were for feedstock use and should be deducted in calculating the consumption level for 2005.

25. The third question relates to the use of stockpiles from 2004 (241 mt) in the calculation of consumption when there is a reported over-supply of 560 mt in 2005. Since the CTC was produced and sold in 2005, the 241 mt should be accounted for as part of the CTC supply in India and as a result bring the oversupply from 560 mt to 801 mt.

26. The fourth question relates to accounting for the 801 mt in the increased level of the CTC inventory in India for the year 2005. As indicated by the World Bank, this is not a significant amount in the overall CTC production and consumption in the country. However depending on the source of the substance, whether from imports or from local production, it could be accounted for differently with implications for the CTC production and consumption in India for 2005.

27. At its 35<sup>th</sup> Meeting in 2005 under the item “ODS stockpiling relative to non-compliance with Montreal Protocol”, the Implementation Committee in considering the intended use of ODS in future years agreed in its Recommendation 35/46:

- (a) To recall that the Committee at its thirty-fourth meeting had requested the



Secretariat to prepare a paper for its consideration on those instances in previous years where Parties which exceeded the prescribed level of consumption or production of a particular controlled substance in a given year had explained that their excess production or consumption represented;

- (i) ODS production in that year which had been stockpiled<sup>1</sup> for domestic destruction or export for destruction in a future year;
  - (ii) ODS production in that year which had been stockpiled for domestic feedstock use or export for that use in a future year;
  - (iii) ODS production in that year which had been stockpiled for export to meet basic domestic needs of developing countries in a future year; and
  - (iv) ODS imported in that year which had been stockpiled for domestic feedstock use in a future year;
- (b) To note with appreciation the paper prepared by the Secretariat in accordance with that request, reproduced as annex II to the present report, containing a technical analysis of the provisions of the Protocol and decisions of the Parties relevant to determining whether the above four instances of stockpiling were consistent with the Protocol;
- (c) To conclude at this stage, on the basis of that technical analysis, that the Secretariat should highlight to the Committee as cases of possible non-compliance those deviations from the Protocol's control measures in a particular year resulting from the situation detailed in paragraphs (a) (i) to (iii) above, with a view to enabling the Committee and the Parties to consider them on a case-by-case basis;
- (d) To also conclude at this stage, on the basis of the technical analysis, that deviations from the Protocol's control measures in a particular year resulting from the situation detailed in paragraph (a) (iv) are consistent with the provisions of the Protocol;
- (e) To fully recognize that the operation of the conclusions in subparagraphs (c) and (d) above, based on the technical analysis, might present practical difficulties for Parties in their efforts to ensure compliance with the Protocol, and that, therefore, the Meeting of the Parties might wish to give further consideration to the issue; and
- (f) To keep the issue under review, to the extent that it falls within the mandate of the Committee, in the light of any further relevant information that might be made available to the Committee, and to request a further analysis by the Secretariat of similar situations of consumption in developing countries, which would include a

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<sup>1</sup> The terms "stockpiled" and "stockpiling" are used in this recommendation to refer to ODS which is not put to its intended use in the year in which it is produced or imported. The explanations submitted by the Parties for their consumption or production deviations did not always specifically use those terms. However, the nature of their explanation indicates that stockpiling had occurred.

record of historical instances of small volume deviations from the Protocol’s control measures and suggested options for streamlining the Parties’ consideration of these matters.”

28. According to the recommendation of the Implementation Committee, if the 801 mt stock increase in 2005 comes from imports and is intended for feedstock use in future, the case could be consistent with the provisions of the Montreal Protocol. However if the 801 mt comes from production and is intended as feedstock use in future, there may be a case of possible non-compliance. Based on the practice of the Ozone Secretariat in calculating CTC production and consumption and the possible treatment of the stock increase, the CTC figures would be as follows:

Table 6

	<b>Treating stock increase as imports</b>	<b>Treating stock increase as local production</b>
<b>Production</b>	<b>MT</b>	<b>MT</b>
Gross production	17,433	17,433
Quantities used for feedstock	15,062	15,062
• Stock Increase	801	0
• VCM	64	64
• Production	1,506	2,307
<b>Consumption</b>		
Production	1,506	2,307
Imports	0	0
CTC produced prior to 2005	0	0
Consumption	1,506	2,307

29. In the context of assessing India’s CTC production and consumption in 2005 against the targets in the Agreement, the 801 mt could potentially increase the CTC production and consumption levels in each case from 1,605 ODP tonnes (or 1,506 mt) to 2,537 ODP tonnes (or 2,307 mt). That would exceed both the production and consumption targets of 1,726 ODP tonnes as set in the Agreement.

30. The issue of intended use of ODS in future years has been placed on the agenda of the 26<sup>th</sup> Meeting of the Open Ended Working Group (OEWG) taking place in Montreal on 3-6 July 2006 under “ODS stockpiling relative to non-compliance with Montreal Protocol”.

### **The 2006 annual programme**

#### A quick overview of the CTC sector in India

31. There are 3 CTC producers in the country. Apart from being used as feedstock primarily in CFC and DV acid chloride production, CTC is also used in India as a process agent and a solvent. For process agents, CTC is used in such sectors as chlorinated rubber, chlorinated

paraffin, pharmaceutical, and agro-industries. As a solvent CTC is used in the textile and garment industries, metal-cleaning industry and as a chemical solvent.

32. A number of implementing agencies are involved in the Indian programme and have been assigned to different sectors. The World Bank is the lead agency and is responsible for the CTC production phase-out and, together with UNIDO, the phase-out of CTC consumption in the process agent and chemical solvent sectors. Japan has contracted UNDP to assist it in phasing out CTC consumption in 4 enterprises for metal cleaning. France and Germany would assist the small users to stop using CTC in the textile and garment industries.

#### The 2005 Work Programme

33. From the end of 2005, a total of 104 CTC projects covering non-feedstock applications have been identified. A summary presenting the details of the number of enterprises, which are included in various stages of project preparation and approval under the CTC sector plan, is given in Table 7 below:

Table 7

<b>Particulars</b>	<b>The World Bank</b>	<b>UNIDO</b>	<b>UNDP</b>	<b>Total</b>
Total number of projects	82	18	4	104
Of the above:				
Project preparation	29	3		32
Review for approval	47			47
Project implementation	6	15	4	25

34. The World Bank supported local efforts in finalizing the verification framework for the CTC phase-out plan and conducted a trial verification in October / November 2005, with the final verification mission taking place in February 2006. A management information system (MIS) has also been designed by the World Bank to collect data on movements of CTC from domestic production and imports. Agreements were signed with the CTC producers for implementation of production sector control targets in June 2005. It can be seen from the above table that a significant number of World Bank projects are still being reviewed for approval, although the Bank expected most projects to have been approved by middle of May 2006 and will move into project implementation stage.

35. Japan and UNDP had two missions in 2005 and visited the 4 CTC-consuming enterprises in the metal-cleaning sector which are affiliated to industries in Japan. Administrative and technical matters were discussed with the plant management and specifications for new metal cleaning degreasers were agreed upon. Pre inspection visits were also undertaken in April 2006 by the UNDP project unit prior to dispatch of equipment.

36. The agreement between the Governments of Germany, France and India was signed in August 2005, followed by a financial agreement concluded between AFD on behalf of the Government of France and GTZ. During 2005, GTZ carried out a series of technical assistance workshops primarily targeting the textile manufacturing industry. These technical workshops focused on technical information on alternatives for small scale enterprises. These enterprises primarily use CTC for stain removal in textiles and garments. Following the successful

laboratory testing of 29 substitutes for CTC as a stain remover, on-site industrial testing was also undertaken for about 9 CTC substitutes. Further testing of the remaining substitutes is under preparation.

37. Pamphlets with details of the successful substitutes have been published and distributed to the textiles and garmenting sector. Local institutions for conducting training programs have also been identified to provide technical assistance and disseminate information on proper use of substitutes to the shop-floor managers. GTZ conducted awareness activities and distributed pamphlets in English and local language in 18 major locations of the textile and garment industries. GTZ also entered into collaboration with the Textile Committee of the Ministry of Textiles to assist it in implementing the programme.

38. Companies under the UNIDO project portfolio were thoroughly investigated through the field mission conducted by the Project Management Unit (PMU) and UNIDO followed by an extensive review of the eligibility of each enterprise. Out of eleven enterprises involved in the implementation programme, most determined the alternative processes to current CTC-based ones, while two relatively small enterprises (producer of pyrophosphoril chloride) will still need to find adequate alternative processes.

39. In 2005, the Government of India having completed contractual agreements with the bilateral agencies involved in the CTC phase-out plan, entered into sub-grant agreements with the CTC producers, and worked further with the World Bank on the verification framework. The Government introduced and implemented a number of policy related activities in connection with the CTC sector plan, namely:

- (a) Registration of CTC Producers, Importers, and Exporters – Registration of ODS users was available until 31 December 2005. Only registered users and producers of CTC would be eligible for assistance under the project, including project funding. This registration drive was primarily aimed at large and medium scale enterprises consuming or producing CTC. The Ozone Cell/PMU is in the process of compiling registration information coming from local government authorities. Currently, about 182 enterprises are registered;
- (b) Import Quota System for CTC – Import of CTC for feedstock applications will continue and any imports for applications controlled by the Montreal Protocol will continue to be prohibited. Imports are allowed only for CTC used for feedstock applications; and
- (c) CTC Production Quota System – The CTC production quota order for the calendar year 2005 was issued in May 2005. The production quotas for 2005 were given to the CTC producers. Based on the verification framework, production and sale of CTC from producers for non-feedstock applications is controlled through the Government Quota Order and is subject to verification.

40. Further progress is reported on the programme of activities implemented by the project management unit (PMU), and the operation of the management information system and the public outreach programme, especially the activities undertaken by GTZ to reach the small industries.

41. The Government of India decided on the fund allocation between the CTC production and consumption in 2005, and retained the flexibility of allocating funds to consumption sector projects depending upon the demand in the industry. The following table shows the budget and commitment of funds for the calendar year 2005.

Table 8

<b>Particulars</b>	<b>Allocation in USD</b>	<b>Budget until and for – CY 2005</b>	<b>Commitment until CY 2005</b>
CTC production sector	28,500,000	13,000,000	11,400,000
Technical assistance component	2,000,000	300,000	300,000
World Bank – consumption sector	7,600,954	4,800,000	4,950,000
UNIDO - consumption sector	3,899,046	3,500,000	2,800,000
Government of Japan – consumption sector	5,000,000	5,000,000	4,000,000
Government of Germany – consumption sector	2,000,000	1,400,000	273,906
Government of France – consumption sector	3,000,000	2,000,000	*)
<b>Total</b>	<b>52,000,000</b>	<b>30,000,000</b>	<b>(To be completed)</b>

\*) After signing of the agreement between the Governments of India, Germany and France, activities had been launched in the amount of approx. USD 100,000 but actual expenditures will be accounted in 2006 only.

42. The World Bank submission concludes that the implementation of the 2005 work programme assisted India to reduce its CTC production from its baseline of 11,553 ODP tonnes to 1,726 ODP tonnes, and consumption from the baseline of 11,505 ODP tonnes to 1,726 ODP tonnes in 2005.

#### The 2006 work programme

43. The 2006 annual programme proposes to reduce the CTC production and consumption from the 2005 level of 1,726 ODP tonnes to 1,147 ODP tonnes under each category. The plan claims to maintain the momentum of CTC phase-out in the production sector and to accelerate implementation of consumption sector projects.

44. The Government plans to continue a number of actions to facilitate the implementation of the 2006 annual work programme, among them production and sales quota licenses and reinforced control on imports.

45. With regard to industry action to reduce CTC consumption, the focus would be on the phase-out of CTC in the 4 large-scale users for metal cleaning to achieve the reduction needed, while continuing the outreach programme by GTZ to the smaller users. UNIDO presents a plan of implementing phase-out projects under its responsibility, with project impact and planned dates of completion.

46. Under the technical assistance programme, the activities which have been on-going would continue in 2006 and would emphasize the assistance provided to the CTC consuming industries, especially the SMEs.

47. For the 2006 work programme, the World Bank is requesting a total of US \$10,755,313 as programme cost and US \$889,148 as support cost. The distribution between the World Bank and the bilateral agencies would be US \$9,556,267 plus US \$716,720 as support cost for the World Bank; US \$500,000 plus US \$85,000 as support cost for France; US \$300,000 plus US \$57,500 as support cost for Germany; and US \$399,046 plus US \$29,928 as support cost for UNIDO.

### **Comments of the Secretariat on the 2006 annual work programme**

48. The industry phase-out targets in the 2005 annual implementation plan (AIP) for project implementation in the process agent and solvent sectors were 1,056 and 3,879 ODP tonnes respectively. This would provide a total phase-out of 4,935 ODP tonnes, reducing consumption from 6,661 to 1,726 ODP tonnes. The Secretariat reviewed the 2005 AIP report and observed that most of the 97 projects in the process agent sector and the activities in the solvent sector were reported as being under implementation. Only five projects under implementation by UNIDO were indicated as completed, with a total phase-out of 241 ODP tonnes in the process agent sector. No direct phase-out appears in relation to other activities.

49. The World Bank clarified that for a considerable proportion of the overall consumption, CTC use has been phased out by the relevant enterprises on their own because of a significant increase in the price of CTC and equipment and/or technical assistance has been provided later to ensure that the safety measures for substitute chemicals were being followed properly. For instance the four large enterprises in the steel industry comprising 10 plants had ceased procuring CTC at the end of 2004 and are using a combination of stockpiling and interim alternatives until conversion of the equipment is completed later this year. All the projects implemented through the World Bank will receive most of the approved grant funds on a retroactive basis.

50. The Secretariat reviewed data in the verification report on the use of CTC for feedstock applications and noted that feedstock use to produce an intermediate chemical named DVAC had more than doubled since 2003. The World Bank clarified that this industry has experienced an annual growth rate from 2003 to 2005 of about 30 per cent, which is consistent with growth experienced in earlier years. This is due to the rapidly increasing demand for a new generation of pesticides (pyrethroids), which use DVAC as a raw material.

51. The Secretariat also noted that the 2005 verification report referred to an increase in the total CTC stockpile in 2005 of 560 ODP tonnes, which is planned to be used entirely for feedstock purposes in 2006. If the Executive Committee is satisfied that this amount should not be part of the total level of consumption reported for 2005, then the 2006 verification report will also need to verify that the quantity was, indeed, used entirely as feedstock.

52. The 2006 AIP, as originally submitted, contained only the most general outline of activities proposed to be implemented during the year, with substantially less detail than provided in the 2005 AIP and with no reference to the proposed annual phase-out achievements by agency. The World Bank subsequently provided the following table indicating the phase-out

targets for participating agencies, status of phase-out by the end of 2005, and 2006 phase-out targets in the respective CTC consumption sub-sector:

Table 9

<b>Implementing agency</b>	<b>CTC Consumption sub-sector</b>	<b>ODP to be phased-out (ODP tonnes)</b>	<b>Status of phase-out achieved by end of 2005</b>	<b>2006 phase-out target (ODP tonnes)</b>
UNIDO	Process agents	816	Expected to be completely addressed by end of 2006. Achieved phase-out is 511 ODP tonnes.	405
Government of Japan (contract with UNDP)	Solvent for metal cleaning in steel industry	484	Phased-out in 2005	0
World Bank	Process agents and chemical solvents	1,033	Expected to be completely addressed by end of 2006. Achieved phase-out: 762 ODP tonnes.	271
Governments of Germany and France	Solvent in textile and garment, and metal cleaning (predominantly SMEs)	3,600	Expected to be addressed over the next three years. Proposed to be addressed through technical support, equipment assistance etc. 1	See Note 1 below

Note 1: Consumption reduction is also expected to be accelerated through a combination of CTC price levels vis-à-vis substitutes as well as supply controls. As estimation of consumption at individual enterprise levels is difficult (except for large enterprises), residual consumption is used the basis for compliance target monitoring.

53. In order to ensure transparency and to facilitate the monitoring of performance, the Secretariat also requested the World Bank to provide information on planned phase-out activities and related budget expenditures with breakdown by agency involved. The following table summarizes the information provided by the World Bank:

Table 10

<b>Implementing agency</b>	<b>CTC Consumption sub-sector</b>	<b>Commitments for 2006 (US \$)</b>	<b>Activities in 2006</b>
World Bank	Technical assistance component to be provided to PMU	600,000	Implementation of quota system for non-feedstock use of CTC Implementation of CTC consumption phase-out projects on behalf of the World Bank Introduction of management information system. Regulatory and policy interventions to facilitate and control CTC phase-out, with inclusion of definition of feedstock in the Ozone Rules, 2000, regulations relating to monitoring measures for feedstock use and import of CTC.
World Bank	Process agents and chemical solvents	1,156,267	
UNIDO	Process agents	399,046	Completion of implementation in the remaining 11 enterprises being supported under the project.
Government of Japan (contract with UNDP)	Solvent for metal cleaning in steel industry	1,000,000	Completion of equipment conversions in the 10 enterprises now under implementation.
Government of Germany	Solvents in textile and garment industry	472,173	GTZ will provide technical assistance to enterprises with a focus on training to achieve phase-out targets, increasing awareness and identifying any additional consumers of CTC. Modalities for additional, specifically designed assistance to CTC consumers in metal cleaning sector are being separately finalised with the respective bilateral agencies.
Government of France	Solvents in metal cleaning sector	657,333	
<b>Total</b>		<b>4,284,819</b>	



**Recommendations**

54. The Executive Committee may wish to:
- (a) Take note of the verification provided by the World Bank of the 2005 work programme of the India CTC phase-out plan;
  - (b) Determine whether the CTC phase-out plan had achieved the CTC production and consumption target for 2005 set in the Agreement, in view of the 801 mt CTC stock increase in 2005;
  - (c) Decide whether to approve the 2006 annual work programme at a total cost of US \$10,755,313 plus associated support cost of US \$889,148, and the subsequent distribution between the World Bank and the bilateral agencies of US \$9,556,267 plus US \$716,720 as support cost for the World Bank; US \$500,000 plus US \$85,000 as support cost for France; US \$300,000 plus US \$57,500 as support cost for Germany; and US \$399,046 plus US \$29,928 as support cost for UNIDO; and
  - (d) Request the World Bank to ensure that the verification of the 2006 work programme examines the 801 mt of CTC stock increase in 2005 and report on its application in 2006.