



# Detailed Implementation Review

## India Health Sector

2006-2007

Volume II

## STATEMENT OF USE AND LIMITATIONS

This Report summarizes the findings of a Detailed Implementation Review (DIR) of five Bank-financed projects in India: the Food and Drugs Capacity Building Project, the Orissa Health Systems Development Project, the Second National AIDS Control Project, the Malaria Control Project, and the Tuberculosis Control Project.

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## Acronyms and Abbreviations

AAS	Atomic Absorption Spectrophotometer with a Hydride Generator Mercury Vapor Generator
ADMO	Assistant District Medical Officer
AH	Area Hospital
AMC	annual maintenance contract
BEC	Bid Evaluation Committee
BER	bid evaluation report
C and S	Care and Support
CARDTS	Citizen Alliance for Rural Development and Training Society
CDMO	Chief District Medical Officer
CFL Ghaziabad	Central Food Laboratory Ghaziabad
CFL Mysore	Central Food Laboratory Mysore
CGSACS	Chhattisgarh AIDS Control Society
CHC	Community Health Center
CIB	Central Insecticide Board
CIPL Ghaziabad	Central Indian Pharmacopoeia Laboratory Ghaziabad
CMC	construction management consultant
CPFMS	Computerized Project Finance Management
CSSM	Child Survival and Safe Motherhood Project
CSW	commercial sex worker
CTD	Central Tuberculosis Division
DACS	District AIDS Control Society
DCA	Development Credit Agreement
DDHS	Deputy Director of Health Services
DEC	diethyl carbamazine citrate
DfID	Department for International Development
DHH	District Headquarters Hospital
DIR	Detailed Implementation Review
DIRDB	Detailed Implementation Review Database
DM	District Malaria (Officer)
DMO	District Malaria Office
DOHFW	Orissa Department of Health and Family Welfare
DOTS	Directly Observed Treatment-Short Course
DTO	District Tuberculosis Officer
EC	Executive Committee
EIF	Equipment, Instruments, and Furnishings
FBS	Fixed Budget Selection

FDCBP	Food and Drugs Capacity Building Project
FDL Mumbai	Food and Drug Laboratory Mumbai
FDTL Lucknow	Food and Drug Testing Laboratory Lucknow
FRSL Ghaziabad	Food Research and Standardization Laboratory Ghaziabad
GAC	Goods Acceptance Certificate
GMP	Good Manufacturing Practices
GMSD	Government Medical Store Depot
GSW	Global Spin Weave
HLL	Hindustan Latex Limited
HPLC	high-performance liquid chromatograph
HSCC	Hospital Services Consultancy Corporation India Limited
ICB	international competitive bidding
ICR	Implementation Completion Report
IDA	International Development Association
IDCO	Orissa Industrial Infrastructure Development Corporation
IEC	information, education, and communication
IIH	Institute of Immunohaematology
INR	Indian Rupee (Throughout this report, USD-equivalent value is provided for convenience only and, unless otherwise noted, is calculated at the rate of INR 45 = USD 1.)
INT	Department of Institutional Integrity
INTIS	INT Information System
IPC	Integrated Purchase Committee
IRCS	Indian Red Cross Society
IR	Inception Report
IRIS	Integrated Records and Information Service database
IRS	individual residual spraying
ISR	Implementation Status Report
ITB	invitation to bid
JAT	Joint Appraisal Team
KSAPS	Karnataka State AIDS Prevention Society
LCC	long-course chemotherapy
LIB	limited international bidding
LOAG2	Loan Administration Group 2
MCP	Malaria Control Project
MDACS	Mumbai District AIDS Control Society
MDCC	Material Dispatch Clearance Certificate
MOHFW	Ministry of Health and Family Welfare
MoU	Memorandum of Understanding

MSACS	Maharashtra AIDS Control Society
MSO	Medical Stores Organization
NACB	National AIDS Control Board
NACO	National AIDS Control Organization
NACP	National AIDS Control Program
NAMP	National Anti-Malaria Program
NARI	National AIDS Research Institute
NCB	national competitive bidding
NGO	non-governmental organization
NIB	National Institute of Biologicals
NICD	National Institute of Communicable Diseases
NMP	National Malaria Eradication Program
NPEP	Indian National Polio Eradication Project
NPFC	National Plasma Fractionation Center
NRL	National Reference Laboratories
NTCP	National Tuberculosis Control Program
OCCL	Orissa Construction Corporation Limited
OCFC	Oversight Committee for Fraud and Corruption
OHSDP	Orissa Health Systems Development Project
OSACS	Orissa State AIDS Control Society
PAD	Project Appraisal Document
PC	product code
PCU	Program Coordination Unit
PHC	Primary Health Center
PHL Bangalore	Public Health Laboratory Bangalore
PHL Bhubaneswar	Public Health Laboratory Bhubaneswar
PHL Meerut	Public Health Laboratory Meerut
PHL Pune	Public Health Laboratory Pune
PHL Thane	Public Health Laboratory Thane
PLA	personal ledger account
PIP	Project Implementation Plan
PMC	Project Management Cell
PSA	Procurement Support Agency
PSR	Project Status Report
PSU	Program Support Unit
QAG	Quality Assurance Group
QCBS	quality- and cost-based selection
RCH	Reproductive and Child Health Project
RFQ	request for quotation

## Acronyms and Abbreviations

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RKDC	Rohit Kumar Das Construction
RNTCP	Revised National Tuberculosis Control Program
SACS	State AIDS Control Society
SAR	South Asia Region
SATHI	STD, AIDS, and Total Health Intervention Project
SBC Patra	Sri Baishnab Charan Patra
SCAG	Senior Consultants Advising Group
SCC	special conditions of contract
SDCL Aurangabad	State Drug Control Laboratory Aurangabad
SDCL Mumbai	State Drug Control Laboratory Mumbai
SDH	Sub Divisional Hospital ( <i>OHSDP Chapter</i> ) State District Hospitals ( <i>NACP II Chapter</i> )
SDL Bangalore	State Drug Laboratory Bangalore
SDR	Special Drawing Rights
SDTRL Bhubaneswar	State Drug Testing and Research Laboratory Bhubaneswar
SFDL Raipur	State Food and Drug Laboratory Raipur
SGS	SGS Nederland, B.V.
SMO	State Malaria (Officer)
SOE	statement of expenditure
SROUT	Social Revival Group of Urban, Rural and Tribals
STAR	Staff Appraisal Report
STI	sexually transmitted infection
TAC	Technical Advisory Committee
TB	tuberculosis
TCP	Tuberculosis Control Project
TI	targeted intervention
TTL	Task Team Leader
UC	Utilization Certificate
UHMH	Ursula Horsman Memorial Hospital
UNDP	United Nations Development Programme
UNICEF	United Nations Children's Fund
UPHSDP	U.P. Health Systems Development Project
UPSACS	Uttar Pradesh State AIDS Control Society
USD	United States dollar
VCTC	Voluntary Counseling and Testing Center
WBCN	World Bank Contract Number
WBOD	World Bank Office Delhi
WHO	World Health Organization

# SECOND NATIONAL AIDS CONTROL PROJECT

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## Overview

### Project Objective

In 1998, Prime Minister A.B. Vajpayee identified HIV/AIDS as “India’s most important public health problem.”<sup>1</sup> At that time, it was estimated that four million Indians were infected with HIV.<sup>2</sup> If immediate steps to contain the epidemic were not taken, the World Bank (Bank) assessed that India could “follow in the footsteps of some of the worst affected countries in Africa, resulting in the erosion of many of the past gains in human development.”<sup>3</sup> Without successful intervention, it was estimated that by 2005 HIV could infect five percent of the adult population—more than 37 million people.<sup>4</sup> However, the epidemic was still in its early stages in 1998, so it was still possible to contain it if immediate action was taken.<sup>5</sup>

The World Bank had been financing HIV/AIDS prevention and treatment programs in India since 1992 through the first National AIDS Control Project (NACP I). In 1998, the Bank was deemed to be the only donor with the capacity to assist India on the scale and within the time frame needed to control HIV/AIDS nationwide.<sup>6</sup> To continue the progress made by NACP I, the Bank funded the Second National HIV/AIDS Control Project (NACP II), which had two aims: (1) to reduce the growth rate of HIV infection in India and (2) to strengthen India’s capacity to respond to HIV/AIDS.<sup>7</sup>

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<sup>1</sup> NACP II Implementation Completion Report (ICR), p. 3, para. 6.1 (Sep. 29, 2006).

<sup>2</sup> NACP II Project Appraisal Document (PAD), preface, p. 2 (Apr. 27, 1999).

<sup>3</sup> NACP II Project Implementation Plan (PIP), pp. 15–16 (May 11, 1999).

<sup>4</sup> PAD, preface, p. 2.

<sup>5</sup> PIP, pp. 15–16.

<sup>6</sup> ICR, pp. 2–3, para. 6.1.

<sup>7</sup> See National Project Implementation Plan, p. 27 (Nov. 11, 1999).

With respect to reducing the growth rate of HIV infection, the project sought to change behavior through “targeted interventions” (TIs), under which high-risk groups were identified and provided with counseling, condoms, treatment of sexually transmitted infections (STIs), and information, education, and communication (IEC) programs.<sup>8</sup> In addition to conducting TIs, the NACP II set out to improve blood safety by, among other things, building and upgrading blood banks, establishing mandatory screening of all blood units, and training providers in the rational use of blood products.<sup>9</sup> In addition, the NACP II aimed to reduce the growth rate of HIV/AIDS by providing low-cost AIDS care to those already afflicted with the disease.<sup>10</sup> With respect to capacity building, the NACP II improved upon the NACP I by significantly increasing the funds allocated towards strategic planning, policy development, and program management.<sup>11</sup>

## Summary of Findings

The DIR’s review of the NACP II found:

- Indicators of corrupt practices in contract awards to non-governmental organizations (NGOs), such as fictitious NGOs receiving contracts and government officials receiving bribes, as well as and a lack of meaningful controls for tracking disbursements to NGOs;
- Deficiencies in the implementation of test kit and blood bank equipment contracts, such as poorly performing test kits and non-functioning equipment;
- Indicators of fraudulent and corrupt practices in the procurement of diagnostic test kits and blood bank equipment—particularly when conducted through decentralized procurement—such as similar bid prices and affiliated bidders; and
- That while the Bank observed and initiated action on some issues subsequently identified by the DIR as indicators of fraud and corruption, its observations and actions were not always timely and not classified as possible signs of fraud and corruption.

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<sup>8</sup> ICR, p. 10, para 8.2, and PAD, p. 6.

<sup>9</sup> Development Credit Agreement (DCA) between India and the International Development Association (IDA Credit No. 3242IN) (NACP II DCA), Schedule 2, Part A(2) (Sep. 14, 1999).

<sup>10</sup> *Ibid*, Schedule 2, Part A(3).

<sup>11</sup> ICR, p. 10, para 8.2.

The DIR found that the NACP II's selection and oversight of NGOs, which the Bank relied on as the delivery mechanisms for services, lacked meaningful financial controls and transparency, thus creating the potential for corrupt practices. Under the NACP II, USD 72.5 million was allocated to service-oriented activities, such as targeted interventions and workshops, a substantial portion of which were carried out by NGOs. These funds were typically disbursed in advance by local-level officials in amounts that were less than USD 20,000. In certain cases, however, these officials failed to track many of these expenditures, putting the distribution and use of these funds at significant risk. The DIR received reports from NGOs that procurement officials demanded and received bribes in exchange for awarding contracts to NGOs. The DIR found that many NGOs that received project contracts were not qualified to perform HIV/AIDS prevention services, and some did not even exist. Some NGOs also submitted falsified documentation to support the work they were purportedly doing. The DIR's findings were corroborated by anonymous complaints to the Bank and news reports.

The DIR's examination of the implementation of diagnostic test kit and blood bank equipment contracts revealed a number of problems. Regarding test kits, the DIR found that some of the test kits supplied by particular companies often performed poorly by producing erroneous or invalid results, potentially resulting in the further spread of disease or in the wastage of blood. While the test kit distribution requirements were generally adhered to, the DIR discovered that inspection and cold-storage procedures were not consistently followed, and that some test kits were distributed near their expiration dates. This, along with external factors like substandard facilities, poorly trained staff, and erratic quality assurance practices, could have contributed to the test kit performance problems.

Regarding the implementation of blood bank equipment contracts, the DIR found that a number of contractors failed to properly install equipment at blood banks; delivered faulty or non-functioning equipment; and/or failed to service the equipment as required under their contracts. The DIR also observed that, in some instances, NACP II procured what appeared to be superfluous equipment.

The DIR's examination of the NACP II's international competitive bidding (ICB) procurement of diagnostic test kits and blood bank equipment—which often involved the same firms whose goods exhibited performance problems—revealed a number of indicators of fraudulent and corrupt practices, such as: (1) long delays between the bid opening and contract award dates; (2) unusual patterns in prices submitted by bidders; (3) apparent avoidance of the Bank's prior-review process

by splitting tenders to fall below prior-review thresholds; (4) low bid submission rates; (5) preferential treatment accorded to certain bidders; and (6) and unexplained expenses and possible self-dealing by the project Procurement Support Agencies (PSAs).

The DIR also reviewed 217 locally procured contracts, valued at INR 118 million (USD 2.6 million), and found that 82 percent by number and 88 percent by value contained one or more indicators of fraudulent and corrupt practices. These contracts were primarily for the provision of diagnostic test kits, blood bank equipment, and laboratory supplies. In addition to many of the indicators detailed above, the local procurement of diagnostic test kits and blood bank equipment exhibited other indicators of fraudulent and corrupt practices, including: (1) similarities in the language and presentation of competing bids; (2) separate bidders with the same phone numbers and addresses; (3) the award of contracts to firms that did not submit bids; and (4) substantial recordkeeping deficiencies.

Early in the project the Bank acknowledged its inability to gauge NGO performance, but did not identify the lack of financial controls over NGO disbursements until just prior to the project's close. To its credit, the Bank has highlighted financial controls over NGOs as a key area of reform in the NACP II's successor project, the Third National AIDS Control Project (NACP III). The Bank appeared to pay limited attention to the performance and quality of the goods supplied to the blood banks and testing centers, instead focusing on the number of such facilities being erected. The Bank consistently identified delays in contract awards as a significant procurement problem, but attributed these delays to insufficient procurement agency capacity and did not appear to consider corrupt practices as a possible contributing factor.

# Project Background

## Project Design

### A. Components

As stated, the NACP II had two components: targeted interventions and capacity building.<sup>12</sup> The majority of project funding (78 percent of total project costs) supported targeted interventions that included a myriad of services, such as information campaigns, counseling, condom provision, HIV testing, and low-cost HIV/AIDS treatment.<sup>13</sup> The funding for the NACP II's targeted intervention component was primarily channeled to NGOs to carry out these services. To enhance India's capacity to test for HIV infection and increase its supplies of reliable blood, the targeted intervention component also funded the procurement—through both centrally administered ICB procurements and decentralized local procurements—of diagnostic HIV test kits and blood bank equipment, and distributed these goods to blood banks and voluntary counseling and testing centers (VCTCs) throughout India.

The remaining 22 percent of the NACP II funding was devoted to capacity-building, decentralizing implementation to semi-autonomous State AIDS Control Societies (SACS) and Regional Circles to avoid bureaucratic disbursement bottlenecks, encouraging management reforms within the SACS, and strengthening systems for monitoring, surveillance, and procurement.<sup>14</sup>

### B. Implementation Structure

#### 1. Project Administration

The NACP II was administered by the National AIDS Control Organization (NACO), an agency within the Government of India's Ministry of Health and Family Welfare (MOHFW).<sup>15</sup> Implementation of the project was decentralized, initially to government-run State AIDS Control Cells, and eventually to quasi-governmental SACS.<sup>16</sup> In some states, below the SACS were the District AIDS Control Societies (DACs) that were responsible, along with the NGOs, for making sure many of

<sup>12</sup> *Ibid.*, para 6.5.

<sup>13</sup> PAD, preface, p 2, and ICR, p. 28. Percentage calculation based on actual/latest estimate of IDA amounts reported.

<sup>14</sup> ICR, p. 4, para 6.5; p. 5, para. 7.1. Percentage calculation based on actual IDA amounts reported.

<sup>15</sup> *Ibid.*, p. 2, para 6.1.

<sup>16</sup> *Ibid.*, p. 3, para. 6.1; p. 6, para. 7.2.

the project's activities were carried out.<sup>17</sup> The Government of India provided grants to the SACS on at least an annual basis.<sup>18</sup> The government obtained the funds by submitting claims to the Bank for reimbursement of actual expenditures incurred by the SACS.<sup>19</sup>

## 2. Procurement of Goods and Services

There were two methods of procurement under the NACP II: (1) ICB and national competitive bidding (NCB) procurements managed by NACO (through an outside PSA, primarily for the procurement of diagnostic test kits and blood-bank equipment; and (2) local contract procurements managed by the SACS and Regional Circles, primarily for the procurement of NGOs, diagnostic test kits, and blood bank equipment. The prior-review thresholds for NACP II are presented in Table 1.<sup>20</sup>

**Table 1. Prior-review Thresholds for NACP II**

Threshold	ICB	NCB		Shopping		Force Account	Direct Contracting
	Goods	Works	Goods	Works	Goods	Works	
NACP II (values in USD)	300,000 or more	30,000 or more	300,000 or less	30,000 or less	30,000 or less	30,000 or less	30,000 or less for works; 5,000 or less for goods
Prior Review (values in USD)	300,000 or more	First contract	First contract	NA	NA	NA	NA

According to Bank databases, the Bank conducted a prior review of six contracts in the first two years of the project (2000–2001) totaling USD 7.4 million, out of a total project funding of USD 193.7 million on the NACP II (3.8 percent).<sup>21</sup> These were the only contracts that were subject to prior-review for the entire NACP II.<sup>22</sup>

<sup>17</sup> PIP, p. 30; ICR, p. 21.

<sup>18</sup> NACP II DCA, Preamble, para (c), and Article III, Section 3.01(e).

<sup>19</sup> This information was set out on the NACO website, [www.naconline.org](http://www.naconline.org).

<sup>20</sup> NACP II DCA, Schedule 3.

<sup>21</sup> Throughout this report, US equivalent value is provide for convenience only and, unless otherwise noted, is calculated at the rate of INR 45 = USD 1.

<sup>22</sup> The DIR reviewed two other contracts that were above the prior-review threshold for the supply of HIV and HCV ELISA Test Kits worth USD 514,239 and USD 442,138 respectively. These were not financed by the Bank because the goods were delivered after the project closing date and therefore ineligible for Bank financing under the NACP II.

With respect to the procurement of NGOs by the SACS, NACO developed and the Bank approved a set of guidelines to create a “transparent and competitive selection process” that would “ensure that NGOs with skills, credibility, and relevant experience” would receive contracts under the NACP II.<sup>23</sup> In accordance with these guidelines, NGOs submitted proposals to a Technical Advisory Committee (TAC) set up by the SACS.<sup>24</sup> If the TAC did not approve the NGO’s proposal, it would either reject it outright, request that the NGO modify its strategy, or request that it modify its budget.<sup>25</sup> If the TAC gave initial approval of the NGO request, a Joint Appraisal Team (JAT), comprised in part of a SACS officer and an NGO TAC member, would be sent to conduct a field inspection of the NGO to examine its facilities, discuss strategy with the NGO staff, and ultimately determine whether the NGO had the capability and credibility to provide the services that the NACP II required.<sup>26</sup> From this inspection, the JAT would generate a field report that, along with the TAC recommendation, would be considered and decided upon at the next meeting of the SACS Executive Committee, a committee chaired by the Health Secretary.<sup>27</sup> If approved by the Executive Committee, the SACS would execute an agreement with the NGO and, upon execution, 50 percent of the agreed-upon annual budget would be disbursed to the NGO.<sup>28</sup>

### C. Project Controls

At the project conception stage, the Bank identified three “substantial” risks to achieving project goals: (1) inadequate institutional and managerial capacity; (2) weak procurement and financial management; and (3) the inability of local organizations to deliver services. The capacity weaknesses were to be mitigated by decentralizing HIV/AIDS prevention activities, promoting wider participation of stakeholders, and allocating funds to capacity building. The procurement and financial management weaknesses were to be mitigated by using an independent procurement agency, relying on state and municipal AIDS Control Societies to make disbursements to end users, and building capacity in the financial management systems. The risk of poor service delivery was to be mitigated by establishing competitive bases for funding, ongoing performance reviews, and prioritizing target groups.<sup>29</sup>

<sup>23</sup> See National Project Implementation Plan, p. 21 (Nov. 11, 1999).

<sup>24</sup> PIP, pp. 21–22.

<sup>25</sup> *Ibid.*, p. 22.

<sup>26</sup> *Ibid.*, p. 22.

<sup>27</sup> *Ibid.*, p. 22.

<sup>28</sup> *Ibid.*, p. 22.

<sup>29</sup> PAD, p. 14.

## D. Project Costs and Timeline

The NACP II commenced on September 11, 1999, and closed on March 31, 2006. While the NACP II was intended to last for just over four years, in the end it lasted for six and a half years, including one two-year extension due to expenditure and disbursement lags, which the Bank believed to be caused by insufficient allocations to the project by the Planning Commission and state-level capacity constraints.<sup>30</sup> The Bank allocated USD 193.7 million to the project as set out in Table 2.

**Table 2. Allocation of Credit on the NACP II**

Category	Allocation (SDR)	Percentage	Equivalent Amount (USD Million)	Expenditures to Be Financed
Civil works	2,120,000	1.5	2.92	80%
Blood bank kits and other equipment, lab and other supplies <sup>a</sup>	31,890,000	22.6	43.86	100% of foreign and local expenditures <sup>b</sup>
STI and OI medicines	16,940,000	12	23.30	90%
Training, workshops, etc. <sup>c</sup>	72,480,000	51.5	99.68	100%
Incremental operating and maintenance costs	7,130,000	5.1	9.81	25%–70% <sup>d</sup>
Unallocated	10,260,000	7.3	14.11	
<b>Totals</b>	<b>140,820,000</b>	<b>100</b>	<b>193.68</b>	

<sup>a</sup> Also including furniture and vehicles.

<sup>b</sup> For other items procured locally, 80 percent of local expenditures were financed.

<sup>c</sup> Also including fellowships, IEC, publicity, surveillance and research, studies, NGO and priority interventions and services, consultant and professional services, management information and monitoring and evaluation systems.

<sup>d</sup> The expenditures financed by the Bank under this category varied by time period accordingly: (i) up to July 31, 2000—70 percent; (ii) August 1, 2000 to July 31, 2001—60 percent; (iii) August 1, 2001 to July 31, 2003—50 percent; and (iv) after July 31, 2003—25 percent.

## Reported Observations and Assessments

In its reviews of the NACP II, the Bank consistently rated the NACP II as satisfactory, although noting a number of project weaknesses. The Bank's concerns centered mostly around (1) project management, including high staff turnover and

<sup>30</sup> ICR, p. 5, para. 6.7.

vacancies both at NACO and in the SACS; (2) procurement, disbursement, and financial management reporting lags; (3) weak NGO capacity; and (4) the Bank's own performance in monitoring and evaluating the project.<sup>31</sup> In its 2006 Implementation Completion Report, the Bank found that risks to the project's development outcome were "low or negligible," although a "[r]obust system need[ed] to be established for monitoring performance of NGOs."<sup>32</sup>

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## The DIR's Approach to the NACP II

The DIR included the NACP II in its review because (1) the Bank's investigation of the Reproductive and Child Health (RCH) project identified it as at risk of exposure to fraud and corruption; (2) its design and scope were similar to a Kenya HIV/AIDS project that a past DIR found to exhibit indicators of fraud and corruption; (3) it followed a design model that the Bank was replicating in many countries; (4) it had a successor project (the NACP III) in its project pipeline; and (5) the Bank had received complaints regarding the NACP II.

The DIR's review of the NACP II can be divided into four broad categories: (1) the selection and oversight of NGOs, which provided services under the NACP II; (2) the implementation of contracts for diagnostic test kits and blood bank equipment; (3) international procurement of diagnostic test kits and blood bank equipment; and (4) local procurement of diagnostic test kits and blood-bank equipment. The DIR was unable to fully review the procurement of NGOs by the SACS because of inadequate documentation provided by the SACS. The DIR conducted its procurement and performance reviews for the NACP II from October 2006 to April 2007.

### Participation of NGOs

The highest proportion of funds under the NACP II—63.5 percent—were allocated to HIV prevention and intervention services (referred to as "Consultants/

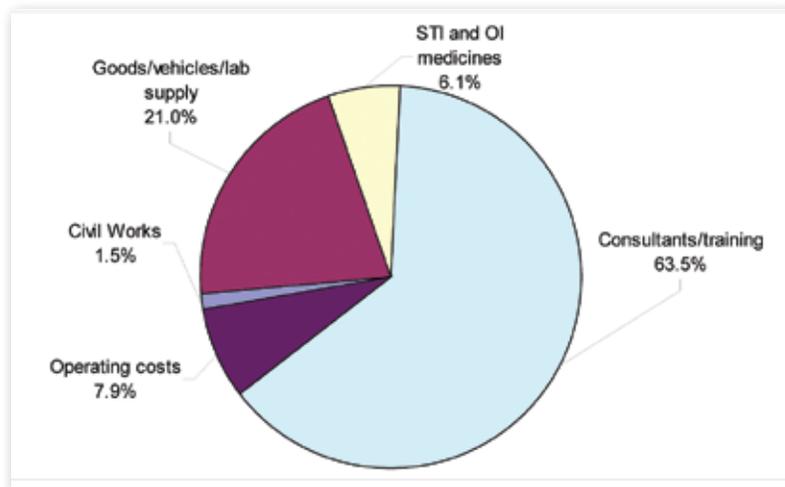
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<sup>31</sup> See Midterm Review of Jun. 5–Jul. 3, 2003 (citing project management, monitoring and evaluation, and procurement); *Aide-Mémoire* of Jan. 24–Feb. 11, 2005 (citing insufficient staffing and financial management lags); and *Aide-Mémoire* of Mar. 6–17, 2006 (citing high turnover and significant internal control issues in SOE reviews).

<sup>32</sup> ICR, pp. 16–17.

Training” in the Bank’s database). Although the exact amount of funds disbursed to NGOs to carry out these services is unknown, NGOs played a central role in these activities; indeed, the Bank referred to NGOs as the “engine of the entire program.”<sup>33</sup> At the project’s conclusion, the Bank’s database reported the following funding breakdown, as set out in Figure 1.

**Figure 1. Breakdown of the NACP II Disbursements**



Given that the majority of project funds were disbursed to consultants/training, and given that NGOs played a significant role in carrying out training and intervention services, the DIR reviewed the selection and oversight of NGOs. This review included an examination of relevant documentation, site visits, and interviews with confidential witnesses. The DIR’s review was focused on four jurisdictions: the states of Karnataka, Chhattisgarh, and Maharashtra, as well as the municipality of Mumbai.<sup>34</sup>

The DIR reviewed the NACP II DCA, NGO contracts, statements of expenditures (SOEs), utilization certificates (UCs), NACO and SACS financial databases, NACO procurement guidelines, evaluation and performance reports, complaints, news articles, and other relevant documentation. On many occasions, the documents that the DIR requested were either incomplete or could not be located by their custodians at the project level. On some occasions, officials refused or ignored the DIR’s requests for documents. In all, the DIR was able to examine at least some

<sup>33</sup> *Aide-Mémoire* of Jan. 19–Feb. 5, 2004.

<sup>34</sup> The NGO component of the NACP II was not financed by the Bank in the states of Uttar Pradesh and Orissa.

procurement or financial documentation for 76 of the 103 NGOs working in the four jurisdictions under review.<sup>35</sup>

In addition, the DIR visited the SACS' offices and selected Bank-funded NGOs in the four jurisdictions. The DIR aimed to verify the records of the NGOs, inspect their facilities, and observe the results of their work. The DIR visited a total of 20 NGOs during its on-site review, as shown in Table 3.

**Table 3. Sites Visited by the DIR**

State/District	NGO Visited
Karnataka (Karnataka State AIDS Prevention Society, or KSAPS)	<ol style="list-style-type: none"> <li>1. Citizen Alliance for Rural Development and Training Society (CARDTS)</li> <li>2. ACCEPT Society</li> <li>3. SNEHADAAN</li> <li>4. KNP + Karnataka</li> </ol>
Maharashtra (Maharashtra AIDS Control Society, or MSACS)	<ol style="list-style-type: none"> <li>1. DKT International India</li> <li>2. STD, AIDS and Total Health Intervention Project (SATHI)</li> <li>3. Samabhava Society</li> <li>4. John Paul Slum Development</li> <li>5. Saheli</li> </ol>
Mumbai District (Mumbai District AIDS Control Society, or MDACS)	<ol style="list-style-type: none"> <li>1. Rashtra Swasthya Prabodhini</li> <li>2. Jagruthi Kendra</li> <li>3. Annasaheb Zhute Pratishtan</li> <li>4. People's Health Organization</li> <li>5. Nagari Sheva Prabodhini</li> </ol>
Chhattisgarh (Chhattisgarh AIDS Control Society, or CGSACS)	<ol style="list-style-type: none"> <li>1. Bramha Sihsha Samiti</li> <li>2. Moulik Sansadhan</li> <li>3. Surya Samajik</li> <li>4. Mahila Manch</li> <li>5. Social Revival Group of Urban, Rural, and Tribals (SROUT)</li> <li>6. BSS</li> </ol>

In addition, the DIR conducted interviews with confidential witnesses at these NGOs. Interviews were also conducted with NACO staff, the SACS staff, and the NACP II Task Team Leaders.

<sup>35</sup> The documentation for 18 NGOs in Chhattisgarh was not reviewed because the CGSACS failed to provide the files. In Karnataka the DIR reviewed documentation for 14 NGOs out of 23 (equal to 61 percent), which was considered an appropriate sample.

## Implementation of Contracts for Test Kits and Blood Bank Equipment

In conducting its implementation review, the DIR sought to visit or meet with the entities involved in the distribution, evaluation, and use of the goods procured under the NACP II: the SACS, Regional Circles, VCTCs, blood banks, and National Reference Laboratories (NRLs). The role of the SACS and Regional Circles was to distribute diagnostic test kits to blood banks and VCTCs, which are located at State District Hospitals (SDHs). The blood banks and VCTCs used the kits to screen blood and test patients for HIV and other diseases. The NRLs performed quality assurance testing for the test kits procured under the NACP II. The blood bank equipment—primarily refrigerators and freezers—was delivered either by the suppliers directly or through the PSA directly to the blood banks, which used the equipment to store and screen blood. In total, the DIR visited five SACS, two regional/district health offices,<sup>36</sup> 11 VCTCs, nine blood banks, and five NRLs in five states.<sup>37</sup>

In each state, the DIR began its site reviews by visiting the SACS.<sup>38</sup> The DIR met with the Project Directors of the SACS and the staff officers with responsibility for procurement, blood safety, and VCTCs. The DIR also examined the Stock Registers of the SACS and inspected the cold-storage facilities for the test kits.

### A. Test Kits

The DIR examined the implementation of the three primary types of diagnostic test kit contracts—HIV ELISA, HIV Rapid, HCV ELISA—procured under five NACP II tenders.<sup>39</sup> The number of tests supplied to the five DIR states from the five

<sup>36</sup> In the state of Maharashtra, there is an additional level of regional coordination through the deputy director of health services and district civil surgeon.

<sup>37</sup> The DIR visited blood banks, VCTCs, and NRLs at the following locations: Chhattisgarh—Pandit Jawaharlal Nehru Medical College, Raipur; Delhi/Noida—National Institute of Communicable Diseases, Delhi; National Institute of Biologicals, Noida; Karnataka—Karnataka Institute of Medical Sciences, Hubli; National Institute of Mental Health and Neurosciences, Bangalore; Rashtrottthana Parishad Blood Bank, Bangalore; Maharashtra—Civil Hospital, Amaravati; Gokuldas Tejpal Hospital, Mumbai; Indian Red Cross Society, Mumbai; Institute of Immunohaematology, Mumbai; National AIDS Research Institute, Pune; Janakalyan Blood Bank, Nasik; King Edward Memorial Hospital, Mumbai; Sir Jamsheedjee Jeebhoy Hospital, Mumbai; Orissa—Capital Hospital, Bhubaneswar; Central Red Cross Blood Bank, Cuttack; Uttar Pradesh—Ganesh Shankar Vidyarthi Memorial Medical College, Kanpur; King George Memorial University, Lucknow; Shyama Prasad Mukherjee Civil Hospital, Lucknow; Ursula Horsman Memorial District Hospital, Kanpur.

<sup>38</sup> The DIR visited the following SACS: Uttar Pradesh State AIDS Control Society (UPSACS); Maharashtra State AIDS Control Society; Mumbai District AIDS Control Society; Karnataka State AIDS Prevention Society; Orissa State AIDS Control Society; and the Chhattisgarh State AIDS Control Society. In Karnataka, it is called the Karnataka State AIDS Prevention Society (KSAPS) to distinguish itself from the Kerala State AIDS Prevention Society, and the Mumbai District AIDS Control Society (MDACS) is a separate society from the Maharashtra SACS because of the large population in Mumbai.

<sup>39</sup> These tenders included the following: (1) IFB 21 with seven schedules for 3,394,800 HIV Rapid tests valued

reviewed packages represented approximately one-third of the total number of diagnostic test kits procured by NACO under the NACP II, as illustrated in Table 4.<sup>40</sup>

**Table 4. Distribution of Test Kits, by Select Packages**

IFB No.	IFB 23	IFB 24	IFB 32 (1-8)	IFB 32-10	IFB 34 (1-8)
Type of Test	HIV ELISA	HCV ELISA	HIV ELISA	HCV Rapid	HCV ELISA
Total No. Tests	3,278,924	3,000,192	3,518,976	351,800	3,518,976
CGSACS	-	9,984	29,952	3,000	29,952
% of Total		0.3%	0.9%	0.9%	0.9%
KSAPS	180,096	305,664	249,984	25,000	249,984
% of Total	5.5%	10.2%	7.1%	7.1%	7.1%
MDACS	107,136	115,968	180,096	18,000	180,096
% of Total	3.3%	3.9%	5.1%	5.1%	5.1%
MSACS	599,808	147,456	249,984	25,000	249,984
% of Total	18.3%	4.9%	7.1%	7.1%	7.1%
OSACS	109,056	110,208	69,888	7,000	69,888
% of Total	3.3%	3.7%	2.0%	2.0%	2.0%
UPSACS	185,472	187,392	279,936	28,000	279,936
% of Total	5.7%	6.2%	8.0%	8.0%	8.0%
Subtotal 5 states	1,181,568	876,672	1,059,840	106,000	1,059,840
% of Total	36.0%	29.2%	30.1%	30.1%	30.1%

The DIR, in accordance with NACO guidelines and with the assistance of three medical consultants at different sites,<sup>41</sup> performed the following tasks in its implementation review:<sup>42</sup>

at USD 824,238; (2) IFB 23 with eight schedules for 3,278,924 HIV ELISA tests valued at USD 729,694; (3) IFB 24 with eight schedules for 3,000,192 HCV ELISA tests valued at USD 599,327; (4) IFB 32 with two schedules—one combined contract of eight schedules for 3,518,976 HIV ELISA tests valued at USD 514,239 and another for 351,800 HCV Rapid tests valued at USD 183,296; and (5) IFB 34 with one combined contract of eight schedules for 3,518,976 HCV ELISA tests valued at USD 442,138.

<sup>40</sup> Three of these contracts (IFB-32 (1-8), IFB-32-10, and IFB-34 (1-8)), totaling USD 1.1 million, were not financed by the Bank because the goods were delivered after the project closing date of March 31, 2006, and were therefore ineligible for Bank financing under the NACP II. The DIR included these in the contract implementation review for two reasons: First, the SACS and end users were more likely to have physical stocks of the goods distributed under these more recent contracts than under the older contracts procured under the NACP II. Second, reviewing these contracts afforded the DIR the opportunity to compare Bank- and non-Bank-financed contracts for procurement and implementation differences.

<sup>41</sup> The DIR's medical consultants were Dr. Usha Baveja (Lucknow, Kanpur, Amaravati, Cuttack, Nasik, Bangalore, and Bhubaneswar); Dr. Kunal Saha (Mumbai and Bangalore); and Dr. Anil Gupta (Mumbai, Bangalore, Hubli, and Raipur).

<sup>42</sup> For all the tasks, the DIR used a checklist based on the NACO guidelines. National Institute of Communicable Diseases and National AIDS Control Organization, *Manual on Quality Assurance Practices in HIV Testing Laboratories* (2002).

- Conducted a physical site inspection for space utilization, cleanliness, ventilation, staffing levels and training, supervision of staff, and the availability of guidelines and procedures.
- Examined the storage conditions of test kits, the condition and documentation of deliveries, and stock records.
- Reviewed the testing strategy,<sup>43</sup> use of instrumentation, conduct of testing procedures, reporting and validation of test results, interpretation of discordant results, maintenance of registry and records, and filing of complaints, if any.
- Assessed the extent to which quality assurance practices were followed.

## **B. Blood Bank Equipment**

The DIR reviewed the implementation of 10 blood bank equipment contracts procured under two packages.<sup>44</sup> These two packages included the following equipment: (1) refrigerated centrifuges to separate cells from serum and plasma; (2) refrigerators to store reagents, kits, and quality control materials requiring refrigerator storage; and (3) freezers (minus 40 and minus 80 degrees Celsius) to store specimens prior to transport. The DIR had the assistance of a biomedical engineering consultant at three sites to lend technical expertise to the review.<sup>45</sup>

The DIR performed the following tasks in its review:

- Assessed the equipment against the technical specifications and terms of delivery
- Queried whether the equipment was installed and operated properly
- Reviewed maintenance and repair records and documentation supplied with the equipment
- Interviewed staff and laboratory technicians on their training received in the operation of the equipment, as well as the overall functioning and performance of the equipment.

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<sup>43</sup> NACO guidelines recommend that blood banks and VCTCs follow a specific testing strategy: For blood safety screening at blood banks, NACO recommends the use of ELISA tests but allows the use of Rapid tests in special situations; VCTCs may use ELISA or Rapid tests as a screening test, with the samples testing positive retested with different test systems.

<sup>44</sup> These were IFB 2, with five schedules valued at USD 1.6 million, and IFB 17, with five schedules valued at USD 0.6 million.

<sup>45</sup> These were Srinivas Taman at the Rashtrathana Parishad Blood Bank in Bangalore, Karnataka, the Karnataka Institute of Medical Sciences in Hubli, Karnataka; and the Central Red Cross Blood Bank in Cuttack, Orissa.

## International Procurement of Test Kits and Blood Bank Equipment

### A. Review of Contract Documents

The DIR examined documents relating to NACO's procurement (through the use of PSAs) of diagnostic test kits for detecting HIV and HCV, and its procurement of blood bank equipment, primarily refrigerators and deep freezers. The DIR also reviewed NACO's procurement of the two NACP II PSAs—National Thermal Power Corporation (NTPC), which served as PSA from 1999 until 2005, and Hindustan Latex Limited (HLL), which served as PSA from 2005 until the close of the project.<sup>46</sup> The DIR received the contract documents from NTPC and HLL in late October 2006, completed its entry of the contract data into the DIR's database by mid-November 2006, and scanned and printed the documents for its review by January 2007.

The DIR examined all contracts procured by NACO through the PSAs. There were a total of 95 such contracts amounting to USD 13.5 million, representing seven percent of the total project funding and 31 percent of the funding allocated for the procurement of test kits and blood bank equipment. NACO used ICB to procure 94 of these 95 contracts.<sup>47</sup> The breakdown of the contracts reviewed by type of good is set out in Table 5.

**Table 5. Number and Value of Contracts Reviewed by DIR by Type of Goods**

Type of Goods	Number of Contracts	Value (USD million)	Percentage in Value (percent)
Diagnostic test kits	57	7.7	57
Blood-bank equipment	38	5.8	43
<b>Total</b>	<b>95</b>	<b>13.5</b>	<b>100</b>

### B. Limitations of Contract Document Review

The DIR's review of contract documents was impeded by the fact that, in most instances, the procurement files provided by the PSAs to the DIR were missing

<sup>46</sup> NTPC managed the procurement for packages IFB 1 through IFB 31, while HLL managed the procurement for packages IFB 32 to IFB 39.

<sup>47</sup> Only one contract was procured under NCB: a March 12, 2002, award to Xcyton Diagnostics for the supply of 450,048 HIV ELISA tests for USD 126,736 (CW-9213/NACO/IFB-NCB-1). It is not apparent whether this was the only NCB contract, or why NCB was even used.

many critical documents, including: (1) bidding documents with the technical specifications for the goods to be procured; (2) contract agreements including special conditions of contract (SCC)—most of the time only Notifications of Award of Contract were present; (3) bids of the participating companies and the copies of the bid securities; and (4) Bank No Objection Letters.

## **Local Procurement of Test Kits and Blood Bank Equipment**

In its local contract review, the DIR reviewed a sample of contracts procured locally by the following seven entities: the Nagpur, Nasik, and Pune Regional Circles<sup>48</sup> in Maharashtra; the MDACS in Mumbai, Maharashtra; the Orissa State AIDS Control Society (OSACS) in Bhubaneswar, Orissa; the KSAPS in Bangalore, Karnataka; and the CGSACS in Raipur, Chhattisgarh.<sup>49</sup> To the extent the documentation was available, the DIR sought to review the 50 highest value contracts at each location. In addition, the DIR spoke with officials at all seven locations.

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# **Findings**

## **Participation of NGOs**

The DIR's review of the participation of NGOs under the NACP II revealed a clear example of how a broad-based lack of financial controls can lead to widespread indicators of potentially corrupt activity.

The NACP II DCA allocated the majority of funds, approximately USD 72.5 million, to a collection of service-oriented activities, including “Training, workshops, fellowships, IEC, advertising and publicity, surveillance and research, studies, NGO and priority interventions services, consultant and professional services,

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<sup>48</sup> Regional Circles are regional-level health services in Maharashtra that both procured local-shopping contracts (along with the SACS) and acted as distribution points between the SACS and end-user facilities.

<sup>49</sup> The methodology employed by the DIR in reviewing contracts at the CGSACS differed from the general methodology used by the DIR in reviewing local procurements at other locations. At the CGSACS, the DIR selected contracts to review based on the findings of the Bank's post-procurement review, which identified deficiencies with respect to eight contracts directly related to diagnostic test kits and blood-bank equipment. Accordingly, the DIR reviewed these eight contracts. The DIR also reviewed an additional six contracts that were won by companies that were repeat winners of contracts procured by the CGSACS.

management information and monitoring and evaluation systems.”<sup>50</sup> Hundreds of NGOs were awarded contracts to provide many of these services.

NACO and the SACS disbursed the funds to the NGOs, often in amounts that were small relative to disbursements in other parts of the project. For example, most grants were allocated to NGOs for targeted interventions, workshops, and other services in amounts that were less than USD 20,000.

The DIR found that, in overseeing the NGOs’ role in the NACP II, neither NACO nor the SACS exercised any meaningful level of control over the tracking of expenditures incurred in relation to advanced funds, putting the distribution and use of these funds at significant risk.

As a result, the broad-based lack of financial controls appeared to have created an environment in which corruption could flourish. For example, the DIR’s site visits and interviews revealed indicators that SACS officials demanded and received bribes from NGOs, awarded contracts to NGOs that were not qualified or did not exist, and awarded contracts to NGOs based on personal connections rather than merit. These findings were corroborated by complaints and news reports.

## **A. Lack of Financial Controls over Disbursements to NGOs**

Both NACO and the SACS offices visited by the DIR lacked any meaningful financial controls over the funds they disbursed to NGOs. NACO officials told the DIR that the primary responsibility for tracking funds was in the hands of SACS officials; accordingly, the DIR found NACO’s financial database to be largely deficient. In the DIR’s site visits to four SACS offices, the DIR found that their financial controls were even more lacking.

### *1. NACO’s Incomplete Database*

Under the project, NACO created a database called the Computerized Programme of Financial Management System (CPFMS) to track all expenditures under the NACP II. The DIR’s forensic accounting team reviewed the database for disbursements to NGOs and found deficiencies.

The forensic accounting team was able to determine that at least USD 46 million appeared to have been spent on NGOs: at least USD 36 million corresponds to amounts recorded as expenditures under NGO-related accounting entries under headers such as “NGO services” or “NGO Services for Preventive Intervention,”

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<sup>50</sup> NACP II DCA, Schedule 1(A)(1).

and at least USD 10 million relate to advances to NGOs for which, as of March 31, 2006, the related expenditure had not yet been incurred.

However, the database suggests that NGOs probably received much more funding than this USD 46 million that was not properly recorded. For recorded transactions relating to expenditures for services, a category in which NGO payments would most likely appear, 85 percent of the transactions did not disclose the name of the party to which the expenditure related. Some of the payee names that were listed in these entries did not relate to an actual company or individual—one payee entry, for example, said “12 NGOs” and another said “Dummy.” Based on this, it is likely that NGOs received substantially more than USD 46 million in disbursements.

The NACO Director of Finance explained to the DIR that the SACS had the primary responsibility for tracking funds allocated to NGOs. He explained that NACO simply received biannual financial reports from these regional offices.

## *2. SACS Deficiencies in the Financial Tracking of NGOs*

The DIR examined financial controls at four SACS and found similar widespread deficiencies. The SACS’ tracking of NGO funds was often incomplete, haphazard, and sometimes non-existent.<sup>51</sup>

- For example, at the CGSACS in Chhattisgarh, the DIR found that the office had operated without a finance officer for five months. The office was unable to provide the DIR with any NGO expenditure receipts or other financial control documents, despite the fact that the office was currently funding 20 NGOs. The office had files for only two of the 20 NGOs, and even those files did not include any documents relating to the NGOs’ SOEs or other financial tracking information; nor did they include documents pertaining to the work that these two NGOs had been performing during the last two years. Thus, the CGSACS did not appear to have implemented a system to track funds that had been allocated to the NGOs.
- The DIR also reviewed the financial controls at the KSAPS in Karnataka. At the time of the DIR’s visit, the KSAPS was working with 23 NGOs that were funded by the Bank. The DIR reviewed the files for 14 of these NGOs and found that, in the majority of cases, the KSAPS was not tracking the funds it had disbursed. SOEs were altogether missing for four NGOs, were not certified for three NGOs, and were incomplete for three NGOs. While the remaining four NGOs appeared to have a complete set of expenditure

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<sup>51</sup> See Tables 6 and 7 of this Report.

documentation, the DIR found that some of this documentation was questionable. For example, the People’s Education Society NGO had submitted a bank statement to the KSAPS reflecting that the NGO’s director had withdrawn more than USD 16,000—writing “to self” in the withdrawal documentation—on various dates over a nine-month period. These findings call into question the accuracy and effectiveness of the KSAPS’ financial controls system.

- Similarly, at the MDACS in Mumbai, the DIR found that funds were being provided to 20 NGOs, but the MDACS did not have any expenditure documentation for eight of them.

In addition, the DIR’s forensic accountants identified a number of large round expenditure entries at multiple SACS. While it is typical for advances to be recorded in round amounts, it would be unusual for expenditures to be so booked. This may be indicative of instances in which advances to NGOs were incorrectly recorded as expenditures prior to the submission of supporting documentation by the NGOs, which was the conclusion reached in several external audit reports of the SACS.<sup>52</sup> However, in some states, for example Chandigarh, this practice has been reversed, as indicated in the Audit Reports of 2004 and 2006.<sup>53</sup> The DIR’s findings are consistent with the findings of the SOE Financial Reviews that had been performed for the Bank. These reviews uncovered widespread deficiencies in the ability of SACS offices to track their disbursements to NGOs.

- For example, the report for the CGSACS stated that the auditing and house-keeping procedures were “extremely poor” because, among other issues, SOEs and/or cash advances were not accompanied by supporting documentation or authorization.<sup>54</sup> This report noted that one NGO, SROUT often used cash payments to pay for its purchases, even for high value items like computers and medicines, and used invoice numbers that were not pre-printed but written by hand.<sup>55</sup> The report also stated that another NGO, Atal Shishu Avam Mahila Kalyan Shiksha Samiti, made and received its entire payment one month in cash, though the NGO was sup-

<sup>52</sup> See 2002–2003 Andhra Pradesh Audit Report, Management Letter, p. 1 (Oct. 11, 2003) (“While preparing the SOEs sent to NACO the advances for implementation of particular projects are shown as expenditure, though such advances are still outstanding at the end of each quarter.”); 2005–2006 Andhra Pradesh Audit Report, Management Letter, p. 1 (Nov. 18, 2006).

<sup>53</sup> See 2003–2004 Chandigarh Audit Report, p. 4 (Jul. 15, 2004); and 2005–2006 Chandigarh Audit Report, p. 3 (May 19, 2006).

<sup>54</sup> Report on Statement of Expenditure Financial Review of Second HIV/AIDS Control Project, Chhattisgarh (Jul. 12, 2006).

<sup>55</sup> *Ibid.*, p. 32.

posed to make and receive payments by check.<sup>56</sup> Like SROUT, this NGO made purchases of medicines from the same company with invoice numbers that were not pre-printed but written by hand.<sup>57</sup>

- In addition to highlighting specific accounting issues, the report identified systemic weaknesses within the CGSACS, such as inadequate segregation of management functions whereby the same individual served as training coordinator, finance officer, and NGO advisor; inadequate monitoring of advances to staff without settlement documentation for those advances; and inadequate internal governance structures.<sup>58</sup>
- The SOE Financial Review for Karnataka reported that the office was not conducting audits of funded NGOs in accordance with NACO guidelines.<sup>59</sup> The report also noted an inadequate system for making adjustment entries, with ledger entries that could not be linked to supporting documentation and an absence of expenditure abstracts.<sup>60</sup> For advances to NGOs, deviations existed between the expenditures approved in the file and the way that expenditures were recorded, expenditures were recorded prior to being approved, and the expenditures pertaining to financial year 2004–05 had not been recorded at all even though they were approved prior to finalization of the accounts.<sup>61</sup>
- For the MSACS, the SOE Financial Review reported that audit reports were missing despite the requirements of the NACO Guidelines.<sup>62</sup> As of the date of the report, the financial records showed outstanding advances of USD 2.2 million of which USD 690,000 had been outstanding for more than one year.<sup>63</sup> The report also noted that the MSACS received funds from different agencies other than NACO, such as the United Nations Development Programme (UNDP), United Nations Children’s Fund (UNICEF), and the World Health Organization (WHO), and the office combined these funds into one account, making it difficult to monitor utilization

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<sup>56</sup> *Ibid.*, p. 6.

<sup>57</sup> *Ibid.*, pp. 32–33.

<sup>58</sup> *Ibid.*, pp. 8–12.

<sup>59</sup> Report on Statement of Expenditure Financial Review of Second HIV/AIDS Control Project, Karnataka, p. 9 (undated).

<sup>60</sup> *Ibid.*

<sup>61</sup> *Ibid.*, p. 7.

<sup>62</sup> Report on Statement of Expenditure Financial Review of Second HIV/AIDS Control Project, Maharashtra, p. 5 (undated).

<sup>63</sup> *Ibid.*, p. 6.

of funds by donor.<sup>64</sup> Similarly, for the MDACS, the SOE Financial Review noted problems with audit reports and records of advances.<sup>65</sup>

Thus, the DIR found that, whether by NACO on the national level or by SACS at the local levels, the financial controls over disbursements to NGOs were largely deficient. While the DIR reviewed letters from the Bank raising these issues with NACO, outlining actions to be taken and timelines to be followed, there is no indication that the Bank followed up to determine whether NACO took the suggested actions.

## B. Selection, Procurement, and Oversight of NGOs

With respect to the procurement of NGOs, the DIR found several indicators of fraud and corruption. The selection and oversight of NGOs was supposed to follow NACO's Procurement Guidelines. However, during the DIR's site visits to some of the NGOs that received NACP II funding, the DIR found that such procedures were often not followed. Instead, the DIR received repeated reports that the SACS officials: (1) demanded and received bribes in exchange for awarding contracts and disbursing funds; (2) awarded contracts and/or disbursed funds to NGOs that were non-existent, performed no services, or had no experience in HIV/AIDS prevention, thereby failing to conform to NACO guideline requirements; (3) seemingly disbursed funds to NGOs based on fraudulent or incomplete accounting and reporting; and (4) awarded contracts to groups associated with politically powerful, well-connected people even when the NGOs in question were not equipped to provide the services they contracted to provide.

**Table 6. Overview of NGOs by State**

State	Total NGOs	Number Reviewed (as per SACS Records)	Total Value in INR	Number Visited
Chhattisgarh	20	2 <sup>a</sup>	34,236,270	6 <sup>b</sup>
Karnataka	23	14 <sup>c</sup>	117,041,596	4
Maharashtra	40	40	104,197,637	5
Mumbai	20	20	83,047,601	5
<b>Total</b>	<b>103</b>	<b>76</b>	<b>338,523,104</b>	<b>20</b>

<sup>64</sup> *Ibid.*

<sup>65</sup> Report on Statement of Expenditure Financial Review of Second HIV/AIDS Control Project, Mumbai, p. 6 (undated).

**Table 7. Indicators of Fraud and/or Corruption Identified by State**

State	Improperly Selected	Fraudulent Accounting	Weak Financial Controls	No Proof of Work Done <sup>d</sup>	Reportedly Paid Bribes	Non Existing	Run from Home <sup>e</sup>	Terminated by SACS for Fraud or Non Performance	Terminated—Still Receiving Funds
Chhattisgarh	8 <sup>f</sup>	4	4	3	18	0	3	2	1
Karnataka	4	3	4	1	8	0	0	0	0
Maharashtra	16	4	6	2	1	1	1	4	0
Mumbai	9	1	7	1	1	0	1	10	1
<b>Total</b>	<b>37</b>	<b>12</b>	<b>21</b>	<b>7</b>	<b>28</b>	<b>1</b>	<b>3</b>	<b>15</b>	<b>2</b>

<sup>a</sup> The CGSACS did not provide files for 18 NGOs

<sup>b</sup> The DIR opted to visit a larger number than the number reviewed. This was because several complaints had been received regarding NGOs in Chhattisgarh and the fact that CGSACS officials refused to provide files for all NGOs with no reason provided

<sup>c</sup> As opposed to Mumbai and Maharashtra where all the files were forwarded by the SACS to the DIR facility in Delhi, the DIR team had to travel to Karnataka to review the files at the KSAPS offices. This action was as the last resort as the DIR team was experiencing difficulties in retrieving the documents from the KSAPS. The DIR was convinced that the number (14 of the NGOs—or 61percent) reviewed was an appropriate sample

<sup>d</sup> Figures from NGOs visited.

<sup>e</sup> Figures from NGOs visited.

<sup>f</sup> Total contract value of USD 171,1641.

### 1. NACO's NGO Selection Guidelines

NACO's guidelines (the guidelines) governed the selection of NGOs. The guidelines outlined which NGO selections would be conducted by NACO officials and which selections would be conducted by state and local officials. NGO contracts above USD 100,000 were subject to competitive biddings and administered by NACO.<sup>66</sup> Contracts below USD 100,000 were selected at the state and local levels based on single sourcing.<sup>67</sup> The NACO Director of Finance informed the DIR that the average NGO contract was valued at around USD 13,000, so the vast majority of contracts were awarded at the state and local levels.

The guidelines also provided the criteria by which NGOs should have been selected.<sup>68</sup> NGOs should have had: "(a) basic infrastructure in place; (b) stable organizational structure; (c) established track record in community development and credibility with the community in which the project is planned; and (d) adequate financial management capacities."<sup>69</sup> Procurement officials should have also verified that the NGOs were legally registered.<sup>70</sup> Before awarding contracts to NGOs, procurement officials were required to conduct due diligence to establish that these criteria were met.

The guidelines state that they have been approved by the World Bank and the National Aids Control Board (NACB). The DCA and the PAD record the Bank's approval of the guidelines. The DCA provided that the selection of "Service Delivery Contractors" would be governed by Bank-approved, project-specific procedures:

Targeting service for priority interventions, operational research, cause of death and other studies estimated to cost less than \$20,000 equivalent per contract, up to an aggregate amount not to exceed \$28,870,000 equivalent, shall be procured in accordance with the provisions of paragraph 3.19 of the Consultant Guidelines and project-specific procedures agreed with the [International Development] Association and set forth in the Project Implementation Plans.<sup>71</sup>

<sup>66</sup> NACO Scheme for the Prevention and Control of AIDS (Phase III), p. 35 (undated).

<sup>67</sup> *Ibid.*

<sup>68</sup> *Ibid.*

<sup>69</sup> *Ibid.*

<sup>70</sup> NACP II PIR, p. 21.

<sup>71</sup> NACP II DCA, Schedule 3, Section II, Part C, para. 2.

This notwithstanding, the DIR observed that the guidelines were inadequate in ensuring effective selection and oversight of NGOs under the project. For example, the SACS were required to select NGOs with a minimum of three years experience and a well-defined structure. However, very few NGOs existed that would satisfy these requirements. Accordingly, the SACS defaulted to the unregulated selection of non-compliant NGOs. In addition, though the DCA provided an aggregate cap of USD 28.87 million for the use of project-specific procurement procedures in hiring NGOs, the fact that the disbursement of procurement funds was not properly tracked meant that this limitation could not be adequately enforced. The Bank did not have the necessary data to indicate when the cap had been reached.

Thus, it appears that the selection and oversight of NGOs under the NACP II operated pursuant to procedures that might not have received Bank approval. Moreover, the inability of the SACS and NACO to track disbursements to NGOs prevented the Bank from being able to determine whether the USD 28.87 million cap had been reached. In addition, the DIR found that the SACS officials often did not even follow NACO procedures when selecting and managing NGOs.

**Table 8. Indicators that SACS Violated NACO Guidelines for NGO Participation**

Indicator	Chhattisgarh	Karnataka	Maharashtra	Mumbai	Total
Total NGOs reviewed	2	14	40	20	76
Selected without request for proposal	8	1	0	2	11
Selected but not registered	(a) <sup>a</sup>	1	8	7	16
Selected without submitting a proposal	(a)	2	8	0	10
Selected but does not exist	(a)	0	1	0	1
Selected but not experienced	(a)	2	1	1	4
No appraisal by TAC and JAT	(a)	5	5	19 <sup>b</sup>	29
Paid without contracts	(a)	2 <sup>c</sup>	8	0 <sup>d</sup>	10
Paid without SOEs	(a)	4	1	8	13
Paid without UCs	(a)	5	14	14	33
Paid even though serious anomalies detected in SOEs and UCs	(a)	2	0	1	3
No audit reports	(a)	8	2	7	17
Funded for irrelevant activities	(a)	0	1	0	1

<sup>a</sup> The CGSACS did not provide files for review by the DIR team.

<sup>b</sup> The DIR found this figure to be exceptionally high *vis à vis* the total number of NGOs working in Mumbai. A follow-up was therefore made with the MDACS. Their response was that the minutes could not be located.

<sup>c</sup> The KSAPS also paid another NGO an amount that exceeded the contract amount.

<sup>d</sup> Six NGOs had signed contracts with no contract amount stated.

## 2. *Bribery of SACS Officials*

In its site visits and interviews, the DIR found indicators that SACS officials often demanded and received bribes for the award of contracts to NGOs. Confidential witnesses from several NGOs informed the DIR that SACS officials awarded contracts to NGOs that paid bribes and terminated contracts of NGOs that refused to pay bribes. Witnesses stated that SACS officials received bribes of between 10 and 40 percent.

- Three confidential witnesses who worked at NGOs all stated that they had personal knowledge of corruption among CGSACS officials. They stated that the officials required bribes of 10 to 15 percent of the grant amount before the officials would reimburse the NGOs for project expenditures. The officials would telephone the NGOs to demand the bribes and would terminate the contract if the bribe was not paid. These confidential witnesses claimed that, while visiting the CGSACS office, they personally witnessed other NGOs, including the Swapnil Education Society and Atalshishu Avam Mahila Kalyan, pay cash bribes in exchange for grants.
- The DIR also interviewed one well-connected local politician in Chhattisgarh who believed that 90 percent of all NGOs that received contracts from the CGSACS had paid bribes to these officials. He thought that the bribes amounted to 20 to 40 percent of the value of the contract. The politician claimed that he knew this because he was once approached by a number of NGOs to be a middleman to facilitate bribe payments. During the interview, the politician called the director of one of the NGOs and let the DIR team listen in on the conversation. The NGO head stated that he paid a 25 percent bribe to a CGSACS official.
- In Karnataka, the DIR learned of another bribery scheme involving the KSAPS from a discussion with another confidential witness. KSAPS officials would routinely use scheduled evaluation visits to the NGOs to demand money. Two officials would solicit 10 to 30 percent from the NGOs for the initial contract award and would again solicit 10 to 30 percent of the grant funds each year as the price for annual grant renewal. In addition, each time an NGO sought reimbursement of an SOE, the officials would require that the NGO pay a facilitation payment of up to USD 100. The witness said that there were recurrent delays in the reimbursement of expenditures to NGOs under the NACP II, due to the refusal of some NGOs to pay bribes to KSAPS officials. Other witnesses also stated

that a delay by KSAPS officials in disbursing funds was a way of putting pressure on the NGOs to pay bribes.

- An NGO representative in Karnataka informed the DIR that KSAPS officials would also make site visits to NGOs that were applying for contracts. If the NGOs did not comply with the NACO guidelines, the officials would tell the NGOs that they could “arrange compliance” if the NGO was willing to pay between 25 and 30 percent of the value of the contract. The witness named the following NGOs as those that received contracts in this manner: Ujwala Vividhodesha Sangha, Baswa Karya Samithi, Sri Shakthi Association, People’s Education Society, Moolika Samvrudhi Arogyabhivrudhi Prathishtana, and Sri Shakthi Association.
- The DIR received similar reports in Maharashtra and Mumbai. In Maharashtra, NGO representatives told the DIR that several NGOs were receiving money from the MSACS but had not performed any work at all. In Mumbai, the DIR was told that bribes were requested and paid through the use of middlemen who approached NGOs and offered to prepare and gain approval for grant proposals in exchange for 10 to 20 percent of the value of the grant.

### 3. *SACS Contract Awards Not in Compliance with NACO Guidelines*

Despite the requirements in the NACO guidelines that NGOs have an established track record in community development and credibility with the community in which the project is planned, SACS officials selected certain NGOs that appeared to have no experience in HIV/AIDS prevention or in any field related to community healthcare and support. Indeed, some NGOs were awarded contracts even though they did not appear to exist at all.

- For example, one confidential witness who regularly conducted training programs for NGOs in Mumbai informed the DIR that the staff of at least three NGOs that received NACP II funding was unable to describe or discuss anything regarding their projects during training sections. In another case, the MSACS awarded several grants to an NGO even though the NGO’s contracting and performance documents showed that it did not conduct any activities related to HIV/AIDS prevention. Instead, the NGO conducted activities like tree planting, rural development, distribution of school dresses, and craft education.

- In Maharashtra, the DIR visited the supposed address of an NGO receiving funds and found nothing resembling an NGO office. Instead, the location was a large residence, and the owner said that the space had not been used by any NGO. (See Photograph 1 on page 410.)
- A confidential witness stated that, as a member of the KSAPS Joint Appraisal Team, he had experienced difficulties in arranging a meeting with an NGO that was receiving funds to assess its capacity. Because the KSAPS did not have correct information on the location of the NGO and representatives from the NGO did not often visit the KSAPS, the appraisal team had a difficult time arranging a meeting with the NGO to ensure compliance. When the witness finally met with a representative from the NGO, it was clear to the witness that the representative had no knowledge of health care and support work and was incapable of answering basic questions about the work. The witness complained to the KSAPS about the NGO's lack of capacity, but officials took no action on the complaint.

#### 4. *Incomplete and Possibly Fraudulent Reporting and Accounting*

Under the NACP II, NGOs were required to submit documentation, such as utilization certificates and SOEs, to the SACS offices to allow SACS officials to verify the type of work that was being done and the way that money was being spent. In reviewing some of this documentation, the DIR detected incomplete and possibly fraudulent reporting and accounting by NGOs to SACS offices.

For example, NGOs appeared to have made false claims to SACS offices regarding their activities and progress in the field.

- Two confidential witnesses from an NGO in Chhattisgarh stated that most NGOs had permanent lists of project “participants” that would be recycled so that the NGOs could appear to be performing their functions. The witnesses explained that NGOs that paid bribes of 20 to 40 percent had very little money to actually carry out their projects so they only did things like hire office staff to prepare books and records in case they were audited. Occasionally, such NGOs would arrange staged photo shoots or arrange for a journalist to write a story lauding the NGO. The NGO would send these reports to the SACS to show progress and justify further disbursements.
- John Paul Slum Development, an NGO operating in Maharashtra, reported that it had been working with truck drivers in Pune. But the DIR visited

the project site, where the NGO purportedly had an office, and found no indication that the NGO was doing work as claimed.

The DIR also found indicators that some NGOs submitted apparently fraudulent SOEs to SACS officials.

- One NGO in Chhattisgarh submitted SOEs that stated it had paid almost USD 400 a month for office space, when in fact the NGO was run out of a home.
- The DIR found that another NGO had submitted documentation claiming to have paid more than USD 200 a month for an office in Raipur between April 2005 and July 2005, but the NGO did not have an office in Raipur.

Moreover, several NGOs that the DIR visited misrepresented expenses in their financial records or could not account for funds received under the NACP II.

- In Maharashtra, the DIR confirmed allegations made by a confidential witness that the director of an NGO was misrepresenting in the financial books the amount paid to his staff. The books stated that employees were paid INR 5,000 (USD 111) per month, but the DIR asked an employee who stated that she and her colleagues each made INR 3,500 (USD 78) per month.
- Another NGO that had been awarded seven contracts from the MSACS could not provide any SOEs or utilization certificates for a large portion of the funds received. At first, the NGO's director could not explain to the DIR how the funds were used. Then the director stated that all funds went to pay salaries, but provided no documentation to support this assertion.
- Similarly, another NGO claimed to distribute condoms and run a mobile clinic with an ambulance but had no documentation supporting the fact that these activities were actually taking place.

##### *5. SACS Contract Awards to Unqualified and Well Connected NGOs*

The DIR learned that some of the project's apparently unqualified NGOs may have been selected due to their association with politically powerful and well connected individuals, not on their merits or qualifications.

- A complainant informed the DIR that eight NGOs that received about USD 170,000 in funding from the CGSACS appeared to be selected for

their political connections.<sup>72</sup> The DIR asked the CGSACS officials for the records for these eight NGOs, but the officials refused to provide any documents except meeting minutes that referenced the amount of funds that they had received. The DIR interviewed a representative from one of the eight NGOs. The representative told the DIR that the CGSACS first rejected his NGO's proposal, but then his family's political friends intervened, forcing the CGSACS to grant the contract to the NGO. The representative also informed the DIR that the NGO's primary financial supporter was also closely tied to a political party in India and that the CGSACS gave the NACP II project in the support's honor. The representative admitted that, even though the NGO had been registered since 1990, it did not have any experience with working in the field of HIV/AIDS prevention. Apparently, the NACP II project was the NGO's first experience working in the area.

- Similarly, the DIR found that an NGO with no experience in HIV/AIDS prevention, that was not legally registered, and that had no financial management structure was selected in Karnataka because of its director's political connections. The DIR reviewed the KSAPS appraisal team's minutes, which stated, "Though the NGO does not have much experience on the development issues, the head of the organization has the perspective and leadership qualities to take up HIV/AIDS intervention." The appraisal team reported that the director was a "prominent person within the society" and recommended that the NGO receive the contract, stating, "Some capacity building and hand holding initially will strengthen the NGO to implement programs as per the guidelines of KSAPS."
- The KSAPS financial officer conducted a follow-up report of this same NGO after the NGO had received two contracts to treat STIs, and concluded that the NGO had no examination table, wash basins, or stocks of medicines to treat patients, the staff had poor knowledge of signs and symptoms of STIs, all expenditures like salaries and rents were paid in cash, and lists of patients were lacking.

### C. Complaints and News Reports

Complaints and news reports also alleged fraud and corruption in the selection and oversight of NGOs in India to provide HIV/AIDS prevention services.

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<sup>72</sup> Confidential complaint (Jan. 27, 2006).

### 1. *Complaints*

The Bank received three complaints in 2005 and 2006 alleging corruption within the NACP II related to NGO selection. The complaints corroborated the DIR's many findings with respect to NGOs.

- On June 29, 2005, the Bank received an anonymous online complaint about NGO procurements in Chhattisgarh, alleging the following: (1) the CGSACS project director was receiving bribes from NGOs and was improperly awarding contracts; (2) eight NGOs that had no experience in providing HIV/AIDS related services were fraudulently selected after paying bribes of 40 percent of the contract value to the project director in advance of the contract award; (3) some NGOs that received grants did not do the work they were contracted to do; and (4) officials of the CGSACS terminated the contracts of three qualified NGOs because they would not pay bribes to the project officials.<sup>73</sup>
- Another complaint alleged that the CGSACS demanded bribes of between 25 and 40 percent of the value of the grants, the CGSACS terminated many NGOs without reason, and many NGOs with no experience in the field were selected for projects.<sup>74</sup> As described earlier, the DIR noted similar problems in its review.
- A third complaint, submitted in 2006, made claims regarding the MSACS, including that the MSACS required NGOs to pay at least 20 percent of the project grants in bribes, that many NGOs that had received funding over the years were not real, and that the government agencies exercised no financial control over the funds.<sup>75</sup> Such allegations corroborated many of the DIR's findings.

### 2. *News Reports*

The DIR's findings were consistent with news reports about the NACP II with respect to fraud and corruption related to NGOs in the project. These news reports about the fraudulent and corrupt nature of the participation of many NGOs in addressing HIV/AIDS in India support the findings made by the DIR in its document reviews, site visits, and interviews.

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<sup>73</sup> Anonymous on-line complaint (Jun. 29, 2005).

<sup>74</sup> K. Kostermans, e-mail to M. Carter et al. (Jan. 16, 2006).

<sup>75</sup> Sri Santanu, letter to Arati Ojha, Bank project director (Oct. 16, 2006).

- For example, in a 2002 *India Today* article entitled “The Mess,” the author alleged that large sums of money being provided by numerous donors, including the Bank, to combat HIV/AIDS in India were being allocated to fraudulent NGOs created solely for the purpose of cashing in on the funds.<sup>76</sup> The author claimed that the NGOs were openly flouting NACO guidelines, and that, of the “1,800 NGOs claiming to work for AIDS prevention, nearly 80 per cent are suspect; many are bogus and others are run by an individual or family.”<sup>77</sup>
- Another *India Today* article entitled “The Deadlier Virus,” from 2001 made reference to “rampant corruption” in both the Maharashtra Government and NGOs:

While the question has been whispered in health circles for a long time, it was only earlier this year that the Estimates Committee of the Maharashtra Assembly started looking for answers. In September, the Committee tabled its findings in the assembly. The report is damning to say the least ....The Committee found that almost 50 per cent of the state’s 157 AIDS control NGOs were bogus. ... There are charges that officials in the MSACS [Maharashtra State AIDS Control Society] and the Mumbai AIDS Control Society (MDACS) . . . take commissions of up to 20 per cent to sanction grants.<sup>78</sup>

## Implementation of Contracts

### A. Implementation of Test Kit Contracts

The DIR observed two broad problems relating to the implementation of diagnostic test kit contracts procured under the NACP II: (1) poorly performing test kits and (2) inventory mismanagement by the SACS, which acted as intermediate distribution points between the test-kit suppliers and the end-user facilities.

#### 1. Poorly Performing Test Kits

The DIR observed that a number of test kits procured under the NACP II performed poorly by yielding invalid test results and/or unusually high false positive,

<sup>76</sup> “The Mess,” *India Today* (Dec. 9, 2002).

<sup>77</sup> *Ibid.*

<sup>78</sup> “The Deadlier Virus,” *India Today* (Mar. 28, 2001).

false negative, or otherwise discordant results.<sup>79</sup> At blood banks, which screen and store blood for transfusions, false negative results carry the serious risk of transfusion-transmitted infections, while false positives result in the wastage of blood. At VCTCs, which test patients for HIV, false negatives can result in the further spread of HIV by infected persons, while false positives can impart a social stigma and psychological distress on the patient. These performance problems were particularly prevalent in the kits supplied by three suppliers: Monozyme India Ltd. (Monozyme), Span Diagnostics Limited (Span Diagnostics), and Zhongshan Bio-Tech Co. Ltd (Zhonghsan).

*Invalid, False Negative, and/or Discordant Results with Test Kits Supplied by Monozyme.* In late 2006, the Indian media reported that Monozyme had been distributing expired diagnostic test kits in West Bengal, and had in some cases been substituting pregnancy test kits for HIV diagnostic test kits.<sup>80</sup> Given that the MDACS awarded Monozyme two contracts for the supply of HIV rapid test kits under the NACP II, the DIR, in light of these media reports, reviewed the performance of the test kits supplied by Monozyme, which were received by 43 facilities in Mumbai.<sup>81</sup> The DIR discovered that five VCTCs had complained to the MDACS that Monozyme-supplied SD Bioline HIV 1/2 Rapid test kits were producing invalid, false negative, and/or discordant results.<sup>82</sup>

- The head of the VCTC at KEM Hospital told the DIR that the procedural control line on Monozyme-supplied SD Bioline kits did not appear, thus producing invalid results. The VCTC official also reported that the Monozyme-supplied SD Bioline kits produced inconsistent and false negative results.<sup>83</sup>
- The professor-in-charge of the VCTC at GT Hospital similarly told the DIR of invalid results from tests performed on patients with Monozyme-supplied SD Bioline kits, also because of the failure of the control line to light up. The professor also explained that the test kits often gave faint readings,

<sup>79</sup> A false negative occurs when a truly positive sample tests negative; a false positive occurs when a truly negative sample tests positive.

<sup>80</sup> “Fake medical kits racket busted,” <http://cities.expressindia.com/fullstory.php?newsid=203107>; “Faulty kit haul,” *The Telegraph*, (Oct. 21, 2006); “Two accused over ‘fake’ HIV tests,” [http://news.bbc.co.uk/go/pr/fr/-/2/hi/south\\_asia/6099064.stm](http://news.bbc.co.uk/go/pr/fr/-/2/hi/south_asia/6099064.stm); “India fears faulty HIV test kits spread disease,” [http://www.chinadaily.com.cn/world/2006-11/03/content\\_723701.htm](http://www.chinadaily.com.cn/world/2006-11/03/content_723701.htm); “Obsolete diagnostic kits sold to city blood bank,” *The Times of India* (Sep. 30, 2006); “Blood test kits OK, not expiry dates,” *The Telegraph* (Mar. 31, 2007).

<sup>81</sup> These were from the following four lots of SD Bioline HIV 1/2 test kits: (1) Lot # 023073 (expiration Oct. 2005); (2) Lot # 023704 (expiration Oct. 2005); (3) Lot # 023088 (expiration Apr. 2006); and (4) Lot # 023089 (expiration May 2006).

<sup>82</sup> These five VCTCs were located at the following hospitals: KEM Hospital, GT Hospital, KBB Hospital, Kasurba Hospital, and LTMMC & LTMGH Hospital.

<sup>83</sup> Dr. Preeti Mehta, e-mail to Dr. Usha Baveja (Jun. 22, 2007).

making it difficult to discern the result. Finally, GT Hospital reported high false negative results with the Monozyme-supplied SD Bioline kits. This report of high false negative results was corroborated by the DIR's analysis of two years of test results provided by GT Hospital, which determined that the Monozyme-supplied SD Bioline kits were indeed yielding a high false negative rate of 0.57 percent over a two-year period,<sup>84</sup> much higher than the 0.2 percent level deemed acceptable by NACO for HIV Rapid tests.<sup>85</sup> These results are set out in Table 9. GT Hospital reported the problem to the MDACS and a company representative worked with the GT laboratory technician. The problem was attributed to technician error and GT continued to use SD Bioline kits without further reported problems.

- The KBB, Kasturba, and LTMMC & LTMGH Hospitals complained to the MDACS in July and August 2004 about the Monozyme-supplied SD Bioline kits. All three facilities reported that neither the control band nor the test line appeared when the tests were performed, thereby rendering the results invalid. The LTMMC & LTMGH Hospital further stated that 19 out of 219 tests over a 24-day period had given such invalid results.<sup>86</sup>

**Table 9. Summary of HIV Test Results from GT Hospital, Mumbai, 2004–2005**

Screening No.	Period of Testing	No. Tested	No. Positive			Discordant Results
			First Kit (Combaids)	Second Kit (Tridot/Comb EIA)	Third Kit (SD Bioline)	
1	May to Dec 2004	1,538	307	307	283	24
2	Jan to Dec 2005	3,382	650	650	646	4
<b>Total</b>		<b>4,920</b>	<b>957</b>	<b>957</b>	<b>929</b>	<b>28</b>
<b>False Negative Rate</b>						<b>0.57%</b>

Source: DIR Analysis of HIV test results from GT Hospital Mumbai.

<sup>84</sup> The false negative rate is calculated as the number of discordant results (28) divided by the total number of samples tested during the period (4,920). The DIR did not have information on the final status of the patients, but the false negatives are the cases that would have been missed if the Monozyme kits were used as the screening test.

<sup>85</sup> <http://www.nacoonline.org/guidelines/Test-Kits.htm>.

<sup>86</sup> Letters from KBB and Kasturba Hospitals to the MDACS (Aug. 30, 2004), and letter from LTMCC & LTMGH Hospital to the MDACS (Jul. 24, 2004).

- At JJ Hospital, Monozyme-supplied SD Bioline kits were used as the first supplemental test<sup>87</sup> on reactive samples screened by either J. Mitra's MICROELISA or Span's ENZAIDS ELISA tests. The DIR reviewed partial test results data from JJ Hospital for a 10-day period for the month of October 2005. Approximately 80 percent of all samples testing positive from the screening HIV ELISA tests (139 out of 174) were subjected to supplemental testing with Monozyme-supplied SD Bioline kits. Table 10 summarizes the results for Monozyme-supplied SD Bioline kits from JJ Hospital in October 2005:<sup>88</sup>

**Table 10. Summary of HIV Test Results from JJ Hospital, Mumbai**

Number tested with initial ELISA screening test (a)	Number with positive initial screening test	Number of positive samples retested with SD Bioline (b)	Number positive with SD Bioline (c)	Concordance Rate (%) **	Discordant Results ** (d)	Discordance Rate (%) **	False Negative Rate (%) **
873	174	139*	122	87.77	17	12.23	1.95

\* It is not known why only 139 out of 174 positive samples were retested as complete data were not available.

\*\* Concordance rate calculated as (c) divided by (b); discordant results calculated as (b) minus (c); discordance rate calculated as (d) divided by (b); and false negative rate calculated as (d) divided by (a).

Source: DIR analysis of test results from October 2005 supplied by JJ Hospital.

The results showed a concordance rate of 87.77 percent and a discordance rate of 12.23 percent between the screening and supplemental tests. This discordance could indicate either an initial screening test producing some false positive results and/or a less sensitive supplemental test producing some false negative results. Assuming the initial ELISA screening test results were correct, the false negative rate for the Monozyme-supplied SD Bioline kits would be 1.95 percent. This false negative rate represents the cases that would have been missed if the Monozyme-

<sup>87</sup> SD Bioline HIV - 1/2 Lot No. 023088 expiring April 2006.

<sup>88</sup> Since results from the second supplemental "tie breaker" test were not available, the overall performance of the Monozyme-supplied SD Bioline test kits could not be assessed from the partial results from JJ Hospital. Furthermore, there were no formal complaints about Monozyme-supplied SD Bioline test kits by JJ Hospital, and the test results records had consistently noted that the procedure controls had worked satisfactorily.

supplied SD Bioline kits were used as the initial screening test. This 1.95 percent rate exceeded the NACO Guidelines of 0.2 percent for HIV rapid tests.<sup>89</sup>

*Invalid, False Positive, and/or Discordant Results with Test Kits Supplied by Span Diagnostics.* A few facilities reported that two types of test kits supplied by Span Diagnostics—Combaid and ENZAIDS ELISA—produced invalid, false positive, and/or discordant results.<sup>90</sup>

- At the National Institute of Mental Health and Neurosciences (NIMHANS) in Bangalore, Karnataka, the head of the Department of Neurovirology, who is also the officer-in-charge of the VCTC at NIMHANS, told the DIR that between 2002 and 2003, Combaid produced very faint readings, which created the potential for an incorrect diagnosis. The officer-in-charge also said that some of the Combaid tests yielded false positive results around the same time. The officer-in-charge said that he informed the company; however, Span Diagnostics reportedly did not take immediate action to correct the problem.
- At the KIMS VCTC in Hubli, two medical officers told the DIR of a similar recent problem with Combaid producing faint readings.<sup>91</sup> According to the officers, three other VCTCs informed KIMS of the same problem.<sup>92</sup> The medical officers believed the problem to be a manufacturing defect and made a verbal report to the KSAPS around December 2006, but said that no follow-up action had been taken.
- The medical officers at the KEM Hospital VCTC also reported unreadable results from Span Diagnostic's ENZAIDS ELISA. They believed, however, that the problem was related to improper storage and transportation of the kits at higher-than-recommended temperatures.<sup>93</sup> The KEM Hospital VCTC reported the problem to the MDACS in a letter dated July 19, 2004, stating that there was no color development in the wells of the internal and external positive controls.<sup>94</sup>

<sup>89</sup> The DIR did not have information on the final status of the patients, nor were the Monozyme-supplied SD Bioline kits used as the initial screening test at any of the VCTCs visited by the DIR.

<sup>90</sup> The historical test kit results for Span Diagnostics' Combaid rapid test were not available for the DIR's review.

<sup>91</sup> This was for IFB 39, which was procured after the project closing and therefore not financed by Bank funds.

<sup>92</sup> These reportedly were the Miraj, Sangh, and Dharwad VCTCs.

<sup>93</sup> According to the DIR's medical consultants, this also could have been due to inadequate antigens in the wells of the positive controls, or a deterioration and/or contamination of the positive kit controls.

<sup>94</sup> The complaints referred to two lots of ENZAIDS ELISA—Lots 5190 and 5243, expiring in Feb. and Mar. 2005 respectively; KEM Hospital VCTC letter to the MDACS (Jul. 19, 2004).

- In addition, the DIR analyzed data provided from KEM Hospital where 19,331 samples were tested with ENZAIDS ELISA over a two-year period from 2004 to 2005. The results showed a concordance rate of 42.86 percent and a discordance rate of 57.14 percent between the screening and two supplemental tests. This discordance could indicate either an initial screening test producing some false positive results and/or a less sensitive supplemental test producing some false negative results. More than half (2,640 or 57.14 percent) of the initially positive samples (4,620) tested negative in the first supplemental test, leaving 1,980 (10.24 percent) testing HIV-positive. The 1,980 figure was corroborated in the second supplemental test. Assuming the supplemental SD Bioline tests were correct—which appears likely because the first and second supplemental tests gave exactly the same results—the data show an overall ENZAIDS ELISA test result false positive rate of 13.66 percent. This result is indicated in Table 11. The false positive rate of 13.66 percent far exceeds the NACO-specified level of 2.0 percent for HIV ELISA tests.

**Table 11. Summary of HIV Test Results from KEM Hospital VCTC, Mumbai**

VCTC KEM Mumbai	Number	Percentage
Initial Screening Test with ENZAIDS ELISA <sup>a</sup>	19,331	
HIV Positive (Screening)	4,620	23.90%
Number Re-tested with SD Bioline	4,620	
HIV Positive (1st Supplemental)	1,980	42.86%
HIV Negative (1st Supplemental)	2,640	57.14%
HIV Positive (2nd Supplemental) tested with SD Bioline	1,980	
HIV Positive (Final)	1,980	10.49%
False Positive Rate	2,640	13.66%

<sup>a</sup> ENZAIDS ELISA test kits used were lot no. 5180, expiration February 2005 and lot no. 5234, expiration March 2005.

*Reports of False Positive Results and High Sensitivity with Test Kits Supplied by Zhongshan.* Two facilities—the Indian Red Cross Society (IRCS) in Mumbai, Maharashtra, and the Rastrotthana Parishad Blood Bank in Bangalore, Karnataka—informed the DIR of false positive results with Zhongshan-supplied HCV ELISA test kits, which resulted in the wastage of blood. In addition, the MDACS

informed NACO in March 2004 of various complaints about Zhongshan kits received from blood banks.<sup>95</sup>

- The IRCS reported to the MDACS in a letter dated January 3, 2006, that Zhongshan test kits were producing false positive results. The IRCS had previously reported similar problems with high false positives with Zhongshan HCV ELISA test kits in 2004 and 2005.<sup>96</sup> However, the results of a comparative study of different HCV ELISA test kits, in which the IRCS retested the samples that were reactive with the Zhongshan kits with another supplemental test kit, indicated that the Zhongshan kits yielded false positive rates of 0.21 percent and 0.14 percent, which are within the acceptable false positive threshold of 2.0 percent established by NACO for HCV ELISA kits.<sup>97</sup>

**Table 12. IRCS Test Results Comparing Zhongshan HCV ELISA with Ortho Diagnostic RIBA HCV 2.0 Strip**

	Number of Samples	Percentage	False positive rate for Zhongshan HCV ELISA (%)
Initially Reactive (Zhongshan)	40	$40/16,200 = 0.25$	$(40-6)/16200 = 0.21$
Repeat Reactive (Zhongshan)	29	$29/16,200 = 0.18$	$(29-6)/16200 = 0.14$
Reactive (Ortho)	6	$6x/16,200 = 0.04$	

Note: The total number of blood units tested during the year (2005) was determined from the number of Zhongshan HCV ELISA test kits issued to the IRCS from the MDACS as per the MDACS stock register. The IRCS received 15 Zhongshan HCV ELISA kits every month, so the total number of blood units was estimated to be 16,200.

Source: DIR analysis of data from IRCS.

- At the Rashtrrothana Parishad Blood Bank<sup>98</sup> in Bangalore, the chief medical officer told the DIR that the blood bank had earlier encountered high sensitivity (that is, unusually high positive rates) with the Zhongshan HCV ELISA test kits, but that recent supplies were producing improved results. The DIR could not substantiate the reports of high sensitivity with

<sup>95</sup> MDACS letter to NACO (Mar. 22, 2004).

<sup>96</sup> IRCS letters (Aug. 11, 2004, and Aug. 5, 2005).

<sup>97</sup> [http://www.nacoonline.org/guidelines/Test kits.htm](http://www.nacoonline.org/guidelines/Test%20kits.htm).

<sup>98</sup> Rashtrrothana Parishad is a non-governmental organization (NGO) engaged in mass education and service to society. The blood bank activities began in 1980 with the identification and registration of blood donors, and blood collection activities started in 1993. In addition to blood collection, Rashtrrothana has a blood component separation unit to separate blood into packed red cells, platelets, plasma, and cryoprecipitate.

Zhongshan kits because the blood bank did not perform any supplemental testing, nor did the blood bank report the problem to the KSAPS.

- Finally, in January 2006, in response to NACO's request for feedback regarding the performance of Zhongshan kits, the MDACS submitted complaints to NACO from a number of facilities. The Tata Memorial Hospital sent three letters between 2003 and 2005, noting high false positive results with the Zhongshan HCV ELISA test kits compared with other kits, as well as contamination in one of the wells of a sealed Zhongshan HCV ELISA test kit.<sup>99</sup> The Rajawadi Hospital Blood Bank reported that the Zhongshan HCV ELISA test-kit controls did not function properly.<sup>100</sup>

The DIR visited the address listed in Zhongshan's bid documents for its local distributor, Spectra Pharma and Health Products, and found a Chinese restaurant called The Golden Dragon. (See Photograph 2 on page 410.) This raises questions as to the legitimacy of Zhongshan's supplier, and increases the possibility that Zhongshan kits were not properly stored or transported.

*Satisfactory Results with Test Kits Supplied by J. Mitra.* Based on very low false positive rates from tests performed with the MICROELISA test kits supplied by J. Mitra and Co., Ltd. (J. Mitra) at two facilities, and in light of the absence of reported complaints about MICROELISA from VCTCs and blood banks, it appeared that MICROELISA performed satisfactorily. For example, based on results provided by the KEM Hospital's VCTC from samples tested by MICROELISA kits from June through August 2006, the DIR calculated a false positive rate of 0.05 percent. The DIR also calculated a false positive rate of 0.07 percent from samples tested with MICROELISA at the Central Red Cross Society in Cuttack over two years.<sup>101</sup> Both results are quite low compared to the 2.0 percent false positive rate specified in NACO's guidelines for HIV ELISA tests.<sup>102</sup> These results are consistent with the feedback from the medical facilities visited by the DIR, which largely reported overall satisfaction with the performance of MICROELISA.<sup>103</sup>

<sup>99</sup> Tata Memorial Hospital letters to the MDACS (Sep. 1, 2003, Jul. 20, 2005, and Dec. 15, 2005).

<sup>100</sup> Rajawadi Hospital letter to the MDACS (Dec. 19, 2005).

<sup>101</sup> The records from the Central Red Cross Society showed that the facility used J. Mitra's MICROELISA lot number EIV01017 with expiration in Mar. 2008. This pertained to IFB 32 Schedule 1-8 (Feb. 13, 2006).

<sup>102</sup> [http://www.nacoonline.org/guidelines/Test\\_kits.htm](http://www.nacoonline.org/guidelines/Test_kits.htm).

<sup>103</sup> The lone exception was the Institute of Immunohaematology (IIH) in Mumbai. The medical officer-in-charge of transfusion transmitted diseases told the DIR that some samples tested with MICROELISA kits supplied in Nov. 2006 produced false positive results. The officer-in-charge explained that the IIH sent two letters to J. Mitra describing this problem but did not receive a response.

*Other Factors Affecting Test-Kit Performance.* A number of other factors, unrelated to the inherent quality of the test kits, could have contributed to the test kit performance problems experienced by the blood banks and VCTCs, including: (1) improper storage of test kits; (2) substandard facilities; and (3) understaffing and/or poorly trained staff.<sup>104</sup>

- NACO's technical specifications called for the supplier to maintain a cold-chain temperature between +2° C and +8° C during storage and transport of the test kits.<sup>105</sup> In addition, the SACS were required to maintain cold-storage facilities to house the test kits. Although this cold-storage requirement was generally adhered to, the DIR did find one instance of noncompliance. At the CGSACS in Raipur, the cold-storage facility was not properly maintained. A number of observations implied that the cooling system was turned on only because of the DIR's presence. First, at the time of the DIR's inspection, the temperature inside the walk-in cooler (+28° C) was well above the temperature range required in the NACO guidelines of +2° to +8° C. Second, the cold storage facility also lacked any alarm system to alert staff to any sudden temperature increases. Finally, the CGSACS officer who has been in charge of the walk-in cooler for five years admitted to the DIR that he does not maintain a temperature log. The high temperature inside the walk-in cooler could have adversely affected the quality of the test kits and their subsequent performance. (See Photograph 3 on page 411.)
- The 20 VCTCs and blood banks visited by the DIR varied in terms of their physical condition. Most buildings were old and in need of general maintenance, repair, and/or renovation. A notable physical limitation observed by the DIR at four sites was the lack of air conditioning to maintain proper temperature, which could potentially affect the test results.<sup>106</sup>
- In most states the DIR generally found the medical staff to be experienced and well trained, and found that they followed proper testing procedures. However, at all four facilities visited in Uttar Pradesh, the DIR observed that the staff was not knowledgeable about the NACO-prescribed testing strategies. In addition, the DIR found a few facilities understaffed. At the SPM Civil Hospital in Lucknow, for example, there was only one formally

<sup>104</sup> In addition, incorrect test results can be a function of the "window period," when a patient is infected with HIV but will test negative.

<sup>105</sup> [http://www.nacoonline.org/guidelines/Test kits.htm](http://www.nacoonline.org/guidelines/Test%20kits.htm).

<sup>106</sup> This was at the SPM Civil Hospital VCTC and Ursula Horsman Memorial Hospital (UHMH) in Uttar Pradesh, Amaravati Civil Hospital VCTC and ICTC in Maharashtra, and the Capital Hospital in Orissa.

trained technician who conducted the testing for the blood bank and the VCTC. Finally, the DIR observed inadequate recording of test results by the staff at five facilities,<sup>107</sup> which hampered the DIR's ability to assess the validity of test results.

*Erratic Quality Assurance Practices.* Under the NACP II, test kits were, in theory, subject to two layers of quality assurance prior to being used by blood banks and VCTCs. The DIR found, however, that the methods and frequency of test kit quality assurance were inconsistent and erratic, possibly causing substandard test kits to evade proper scrutiny.

- According to officials at NTPC, test kits procured under the NACP II were subjected to a mandatory pre-dispatch inspection at one of the government-approved NRLs.<sup>108</sup> Based on its discussions with five NRLs,<sup>109</sup> however, the DIR found that the sample sizes used to evaluate the test kits were not consistent across the NRLs and were usually smaller than international standards.<sup>110</sup> For example, NIMHANS used sample sizes of between 25 to 100 tests; the National Institute of Communicable Disease required at least 50 to 500 tests; and the National AIDS Research Institute used a panel of 100. In addition, because the NRLs only evaluated samples provided to them by the suppliers—the NRLs did not visit the suppliers' facilities to draw samples—the NRLs could not verify whether the samples evaluated derived from the same batch of test kits that were to be supplied. Thus, substandard kits may have escaped evaluation.
- According to NACO guidelines, all facilities engaged in HIV testing have to practice quality assurance.<sup>111</sup> This included testing serum panels with known results sent from the NRLs, sending representative samples to the NRLs for cross-checking, and testing control samples provided by the supplier. However, the DIR found that a number of facilities did not regularly practice these controls.<sup>112</sup>

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<sup>107</sup> These facilities were USMH and GSVM Medical College in Kanpur; KEM Hospital and JJ Hospital in Mumbai; and Capital Hospital in Bhubaneswar.

<sup>108</sup> The DIR understands that NACO introduced this pre-dispatch inspection requirement towards the latter portion of the NACP II, after receiving complaints about test kit quality.

<sup>109</sup> The DIR visited the following five NRLs: Institute of Immunohaematology (IIH), Mumbai; National Institute of Biologicals (NIB), Noida; National Institute of Communicable Diseases (NICD), Delhi; National AIDS Research Institute (NARI), Pune; and National Institute of Mental Health and Neurosciences (NIMHANS), Bangalore.

<sup>110</sup> WHO guidelines recommend a sample size of 400 to 450 for ELISA and 200 to 250 for Rapid tests.

<sup>111</sup> Usha K. Baveja, "Implementation of QAP at Different Levels of the HIV Testing Network and Job Definitions of Each Level," in *Manual on Quality Assurance Practices in HIV Testing Laboratories*, National Institute of Communicable Diseases and National AIDS Control Organization (2002).

<sup>112</sup> These facilities included the SPM Civil Hospital blood bank and VCTC, and the KGMU VCTC in Lucknow;

## 2. Stock Registration Lapses and Inventory Mismatch at the SACS

In accordance with NACO's distribution scheme, test kit suppliers delivered their goods to the SACS, which would then distribute the kits to the VCTCs and blood banks within their jurisdictions. Accordingly, the SACS were required to maintain their own stock registers and ensure that the test kits did not expire prior to distribution. In general, the DIR found that the SACS visited kept well-maintained and accurate records of test kits received. At a few SACS, however, the DIR found discrepancies between stock records and inventory on hand, and discrepancies between the SACS' stock records and the stock records of end-user facilities. In addition, the DIR found instances of test kits being distributed very close to their expiration dates or, in some cases, not being distributed at all. At best, these management lapses resulted in wasted test kits, as the expired or nearly expired kits would have to be discarded. At worst, this could have resulted in the use of expired test kits that may have adversely affected test kit performance.

*Discrepancies between Stock Records and Inventory on Hand at Nasik Regional Circle.* From its stock register analysis at the Nasik Regional Circle in Maharashtra, the DIR found a number discrepancies between the stock register entries and the actual inventory on hand.<sup>113</sup> These discrepancies are set out in Table 13.

**Table 13. Stock Register Discrepancies at Nasik Regional Circle, Maharashtra**

Type of Test Kit	Contract Reference # and Contractor	Batch/Lot # Date of Manufacturing (DoM)/ Date of Expiry (DoE)	Stock Balance (# of Test Kits)	Actual Stock on Hand (# of Test Kits)
HCV ELISA (96 tests/kit)	IFB-34-SCH-1-8/ Zhongshan Bio-Tech	No. 20060920 DoM: Sep-12-06 DoE: Sep-12-07	48 kits (4,608 tests)	32 kits (3,072 tests)
HCV rapid (50 tests/kit)	IFB-32-SCH-10/ Span Diagnostics	Batch No. 8237 DoM: Jun-9-06 DoE: Jun-8-07	Records were missing	7 kits (350 tests)
		Batch No. 8813 DoM: Sep-28-06 DoE: Sep-27-07	2 kits (100 tests)	14 kits (700 tests)
		Batch No. 9097 DoM: Nov-22-06 DoE: Nov-21-07	25 kits (1,250 tests)	22 kits (1,100 tests)

KEM Hospital and Indian Red Cross Society in Mumbai; Civil Hospital blood bank in Amaravati; Janakalyan blood bank in Nasik, Rashtrathana, blood bank and NIMHANS in Bangalore; GSVM Medical College and UHMH in Kanpur; JNM Medical College in Raipur; the Central Red Cross blood bank in Cuttack; and KIMS in Hubli.

<sup>113</sup> Nasik DDHS Stock Register Year 2006–2007, pp. 102, 109, and 112.

Source: Based on physical stock inside the walk-in cooler at the Nasik DDHS, Maharashtra, on April 9, 2007.

*Inventory Mismanagement and Stock Record Discrepancies at the KSAPS.* The DIR's review of the KSAPS stock register found that the KSAPS distributed nearly expired test kits and failed to distribute other test kits prior to their expiration date. In addition, the DIR found discrepancies between the KSAPS's stock records and those of end-user facilities to which the KSAPS distributed test kits.

- According to the KSAPS's stock records, a total of 24 HIV Combaids-Rs kits (1,152 tests) were disbursed to four facilities on May 4, 7, 10, and 11, 2004, in the same month of their expiration.<sup>114</sup>
- In addition, the KSAPS failed to distribute 363 HIV Combaids-Rs kits (17,424 tests) by the expiration date of May 2004, but the KSAPS officials could not confirm whether the expired kits had been disposed of, nor could they initially locate the kits upon the DIR's inquiries. The DIR ultimately found 168 of these expired kits (8,064 tests) on the rooftop of the KSAPS office building after the KSAPS's former stock officer informed the KSAPS that they might be there.<sup>115</sup> (See Photograph 4 on page 412.)
- The DIR also discovered on the KSAPS rooftop 100 Zhongshan HCV ELISA test kits that had expired on January 12, 2006, roughly 16 months prior to the DIR's visit.<sup>116</sup> (See Photograph 5 on page 412.)
- The KSAPS appeared to distribute Zhonghsan HCV ELISA kits to the Rashtrathana blood bank very close to their expiration date. As shown in Table 14, Rashtrathana's records showed that the blood bank discarded almost half (48.49 percent) of its HCV ELISA test kit supplied by the KSAPS in January and October of 2005 because the test kits were not used prior to their expiration dates.

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<sup>114</sup> KSAPS Stock Register, Volume I, HIV Combaids Rapid Test Kits section, p. 26.

<sup>115</sup> *Ibid.*, pp. 30–31.

<sup>116</sup> These 100 kits originated from Batch No. 20050112 (Date of Manufacture: Jan. 12, 2005; Date of Expiry: Jan. 12, 2006; Received: Mar. 28, 2005); KSAPS Stock Register, Volume I, HCV ELISA Test Kits section, pp. 260 and 263.

**Table 14. Discarded Zhongshan HCV ELISA Test Kits, Rashtrrothana Parishad Blood Bank, Bangalore**

	Batch No.20040302	Batch No. 20050112	Total (tests)
Date of expiry (DoE)	March 2, 2005	January 12, 2006	
Date received from the KSAPS	January 5, 2005	October 9, 2005	
No. of kits (tests) received	16 (1,536 tests)	31 (2,976 tests)	4,512
No. of kits (tests) discarded	15 kits and 63 tests (1,440 tests)	7 kits and 76 tests (748 tests)	2,188
Percentage discarded	93.75	25.13	48.49

Source: Rashtrrothana Blood Bank Stock Register, HCV Elisa Test Kits Section, pp. 57, 59, and 60.

- With respect to stock record discrepancies, the DIR could not trace a quantity of 581 Zhongshan HCV ELISA kits (55,776 tests) that the KSAPS stock register recorded as having been “dumped”<sup>117</sup> on NIMHANS on April 12, 2004, and then returned by NIMHANS on October 20, 2004.<sup>118</sup> The NIMHANS stock register, however, did not show any receipt or return of the kits from the KSAPS. The KSAPS officials explained that the test kits were being stored temporarily at NIMHANS because of insufficient storage space at the KSAPS. However, the staff at both the NIMHANS Blood Bank and VCTC<sup>119</sup> ruled out the possibility of storing such a large one-off consignment for the KSAPS at their facility without their knowledge.
- The DIR also observed a discrepancy between the KSAPS stock register and actual inventory on-hand. The KSAPS stock register showed an increase of 361 Zhongshan HCV ELISA kits between October 6, 2004, and October 8, 2004, that was not attributed to any deliveries. The KSAPS stock officer, who joined the KSAPS during that period, told the DIR that he found those excess kits when he took inventory of the physical stock.<sup>120</sup>

## B. Implementation of Blood Bank Equipment Contracts

From its site observations and review of field documents, the DIR found the following implementation issues with respect to blood bank equipment contracts related to the NACP II: (1) non-installation, late installation, and poor installation of equipment; (2) lack of consultation and delivery of superfluous equipment;

<sup>117</sup> As written in the KSAPS stock register.

<sup>118</sup> KSAPS Stock Register Volume I: HCV ELISA Test Kits Section, p. 255.

<sup>119</sup> The NIMHANS VCTC did not receive any Zhongshan HCV ELISA test kits.

<sup>120</sup> KSAPS Stock Register, Volume I, HCV ELISA Test Kits Section, p. 255.

(3) faulty equipment with substandard components; (4) non-servicing and irregular servicing of equipment; and (5) discrepancies between invoices and contract awards. These problems, in some cases, severely affected the blood banks' ability to maintain their blood stocks.

### *1. Installation Problems*

The DIR found that blood banks encountered significant delays in the installation and commissioning of equipment, and that often equipment was poorly installed or not installed at all. The most serious example involved the -80° C and -40° C deep freezers supplied by NuAire Inc.(NuAire) to the Central Red Cross blood bank in Cuttack pursuant to IFB 2A-2 and 2A-3, respectively.<sup>121</sup>

The Central Red Cross blood bank in Cuttack received -40° C and -80° C freezers in April 2001, but NuAire's servicing agent, Omega Instruments (India) Pvt. Ltd., failed to install the freezers during its initial visit on June 12, 2001.<sup>122</sup> The -80° C freezer was eventually installed in December 2002,<sup>123</sup> but the blood bank had to acquire its own voltage stabilizer to operate it. Despite both freezers not having been initially installed, the blood bank signed the acceptance documents on the day of NuAire's servicing agent's initial visit. Moreover, the acceptance documents for both freezers were modified and lacked the standard provisions regarding the supplier's fulfillment of its contractual obligations for installation, commissioning, and training.<sup>124</sup> The -40° C freezer was eventually installed by a local engineer in October 2004—more than three years after it was initially delivered.<sup>125</sup>

### *2. Premature Delivery and Delivery of Superfluous Equipment*

The DIR found that most of the -80° C NuAire freezers were of limited use and would not have been requested had the end users been consulted, and that in one instance, both NuAire's -40° C and -80° C freezers were delivered prematurely before the end user was prepared to accept them.

- According to the KGMU blood bank's staff, the facility did not have the necessary space and blood component separation license when it received

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<sup>121</sup> NTPC terminated both of these contracts on Jan. 27, 2003, voiding its warranty and AMC obligations.

<sup>122</sup> Director of Central Red Cross blood bank in Cuttack, letter to Omega Instruments (I) Pvt. Ltd. (Jun. 12, 2001).

<sup>123</sup> Equipment Stock Register of the Cuttack Central Red Cross blood bank, p.37.

<sup>124</sup> Proforma of Goods Acceptance Certificates for -40° C and -80° C freezers, issued by the Cuttack Central Red Cross blood bank to Prime Labs, a local agent of NuAire (Jun. 12, 2001).

<sup>125</sup> Director of the Central Red Cross blood bank in Cuttack letter to Project Director, OSACS Cell (Oct. 14, 2004).

Nuaire freezers in June 2001.<sup>126</sup> The hospital apparently repacked both freezers and did not use them until it obtained the license in 2005. By the time the equipment was put into use, the two-year warranty period had expired; thus, the cost of any repairs on the freezers would have been borne by the blood bank. The doctors at KGMU generally felt that NACO had “pushed” the equipment on the hospital.

- The senior medical officers at the National Plasma Fractionation Center (NPFC) in Mumbai told the DIR that their opinions were not taken into account when the freezer was distributed to the hospital. They considered the Nuaire freezers inferior to similar equipment available on the market, and stated that, if given a choice, they would have preferred using a horizontally placed freezer rather than a vertical one. The technical staff at the NPFC explained that they converted the -80° C freezer to -40° C to extend the useful life of the freezer.
- The staff at the KIMS Hubli blood bank explained that the blood bank used its -80° C freezer only to meet seasonal demand in August and September.

In addition, two facilities reported that water baths supplied by Spectrum Scientific Pvt. Ltd. (Spectrum Scientific) were unnecessary.<sup>127</sup>

- The DIR observed that Spectrum water baths were not in service either at the Rashtrotthana blood bank in Bangalore or at the JNM College Hospital’s blood bank in Raipur. At Rashtrotthana, the water bath had been idle since May 2005. While the Rashtrotthana staff did not explicitly question the practical utility of the machine, staff at the JNM College Hospital’s blood bank clearly stated that they did not require the equipment.

### 3. *Non-functioning and Faulty Equipment*

During its site inspections, the DIR discovered that all of the freezers supplied by Nuaire (under IFB 2-2 and IFB 2-3) and most of the refrigerators supplied by Remi Instruments Ltd (Remi) (under IFB 2-5) had non-functioning temperature chart recorders—essentially back-up temperature devices—which were required by the technical specifications.<sup>128</sup>

<sup>126</sup> Goods Receipt Reports by Nutek Instruments, Nuaire’s agent, for -40° C and -80° C freezers (Jun. 26, 2001); Service Installation Reports: No. 58 for -80° C freezer, and No.60/G for -40° C freezer (Jun. 27, 2001).

<sup>127</sup> These water baths were supplied pursuant to IFB 2-4 and IFB 17-4.

<sup>128</sup> Para. 3 of Annexure VI “Technical Specifications,” Letter of Award, Ref. No. : CW-CM-9213-C-02/A/03-008 (-40° C Deep Freezer), dated Oct. 6, 2000; Para. 3 of Annexure VI “Technical Specifications,” Letter of Award, Ref. No. CW-CM-9213-C-02/A/02-009 (-80° C Freezer), dated Oct. 6, 2000; Para. 4 of Annexure VI “Technical

*Nuaire Supplied Non-functioning and Faulty -40° C and -80° C Deep Freezers.* The DIR found problems with the chart recorders on both the -40° C and -80° C Nuaire deep freezers at seven facilities.

- At the KGMU's blood bank, the DIR learned that the chart recorders of both the -40° C and -80° C freezers had been out of order at least since the date when the freezers were put into operation in 2005. However, based on the installation reports and acceptance certificates signed by the blood bank officer, it appeared that the chart recorders were found compliant when the freezers were installed and tested in June 2001.<sup>129</sup>
- At the Amaravati Civil Hospital in Maharashtra, the chart recorder in the -40° C deep freezer, which was broken at the time of the DIR's visit, had not been working since December 2003. The temperature chart recorder on the functioning -80° C freezer was also out of order at the time of the DIR's inspection. Because the hospital staff never reported it, the DIR was unable to establish when the problem occurred.<sup>130</sup> (See Photograph 6 on page 413.)
- The Janakalyan blood bank in Nasik first experienced a problem with the chart recorder on its -40° C freezer in August 2001—just two months after it was installed—but because the facility's records were incomplete, the DIR was unable to determine whether the problem had been rectified at the time. A blood-bank technician told the DIR that the chart recorder of both freezers had not been operational for a long time. (See Photograph 7 on page 413.)
- Finally, at four other blood-bank locations—the Cuttack Central Red Cross, the NPFC in Mumbai, the KIMS in Hubli, and the JNM Medical College in Raipur—the DIR observed that the chart recorders of both -40° C and -80° C freezers were provided with a single use battery, contrary to the technical specifications.

*Remi Supplied Non-functioning and Faulty Refrigerators.* In the technical evaluation of Remi's bid for blood bank refrigerators, a graphic inkless chart recorder

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Specifications," Letter of Award, Ref. No.: CW-CM-9213-C-002/01/e-o-C-001-00, Remi blood bank refrigerator (Oct. 6, 2000). The non-functioning chart recorders were observed by the biomedical engineer, Mr. Srinivas Tamam, who provided technical assistance to the DIR on the site visits.

<sup>129</sup> Service Installation Reports for KGMU: No. 58 for -80° C freezer, and No. 60/G for -40° C freezer (Jun. 27, 2001). The technician at KGMU did not maintain a temperature log. He told the DIR that he checked the temperature by opening the freezers and "feeling" if the inside temperature was "right."

<sup>130</sup> At the Amaravati Civil Hospital, the technician maintained the temperature log but told the DIR that he trusted the temperature readings but did not know if they were accurate.

and rechargeable battery pack were listed as optional accessories.<sup>131</sup> Remi, however agreed to supply both items during the pre-award meeting with NTPC on October 6, 2000.<sup>132</sup> The DIR found these items to be either absent or not functioning in four sites visited.

- The DIR's biomedical engineering consultant verified that the Remi refrigerators at the Cuttack Central Red Cross and the KIMS blood banks lacked battery back-ups. Additionally, the chart recorder of one of the refrigerators at the Cuttack Central Red Cross was out of order at the time of the DIR's visit. The Cuttack Central Red Cross reported both malfunctioning refrigerators to Remi on January 20, 2007, but the company did not respond either to this report or to a follow-up report of March 16, 2007, even though its annual maintenance contract (AMC) period extended to April 18, 2007.<sup>133</sup>
- At the Amaravati Civil Hospital in Maharashtra, the hospital staff explained to the DIR that the temperature chart recorder had been taken out of one of its refrigerators by a local technician when it was found to be irreparable. (See Photograph 8 on page 414.) The chart recorder in the second refrigerator also did not function, nor did the refrigerator itself. Both chart recorders also lacked a battery back-up.
- At the Janakalyan Blood Bank in Maharashtra, the DIR observed that the chart recorders did not function on either refrigerator. This was confirmed by the blood bank staff.
- Both of the chart recorders on the Remi refrigerators were out of order at the JNM College Hospital blood bank in Raipur. However, the staff did not know for how long they had been non-operational. In the absence of any further information or documentation that should have been maintained by the blood bank, the DIR could not establish whether the supplier still had the AMC obligations under the contract to repair the faulty chart recorders.

*Spectrum Scientific Supplied Faulty Refrigerated Water Baths.* Staff at the Central Red Cross blood bank in Cuttack told the DIR that the refrigerated water bath supplied by Spectrum Scientific never functioned properly since its installation

<sup>131</sup> Bid Evaluation Report for the CW-9213/NACO/IFB-2A/5 contract (May 9, 2000).

<sup>132</sup> Minutes of Pre-Award Meeting for the CW-9213/NACO/IFB-2A/5 contract (Oct. 6, 2000).

<sup>133</sup> Director of the Cuttack Red Cross blood bank, letter to Remi (Reference No. 1032) (Jan. 20, 2007); and director of the Cuttack Red Cross blood bank, letter to Remi (Reference No. 1210) (Mar. 16, 2007).

in August 2001. Despite the faulty voltage stabilizer supplied by the company, the blood bank signed the acceptance certificate, even though Spectrum Scientific's engineer had noted in his installation report that he could not demonstrate how to operate the equipment without first replacing the stabilizer.<sup>134</sup> The Central Red Cross blood bank complained repeatedly to Spectrum as well as to the OSACS from September 2005 until November 2006, but the defect in the cooling system was never rectified.

#### 4. *Non-servicing and Irregular Servicing of Equipment*

From the site visits, it was apparent that there was inadequate monitoring by the PSA in ensuring that the equipment suppliers executed the AMC and warranty obligations of their contracts. As a result, many blood banks ultimately had to use their own funds to cover the cost of repairs, and often went long periods with non-functioning equipment.

*Nuaire -40° C and -80° C Deep Freezers Were Not Serviced.* In its site visits, the DIR learned of numerous unattended problems with Nuaire-supplied deep freezers. Although Nuaire voided the warranty on both its -40° C and -80° C freezers following NTPC's termination of its contract on January 27, 2003, it appeared that neither the PSAs (NTPC and HLL) nor NACO made alternative arrangements for the servicing of Nuaire freezers.

- The -40° C freezer at the Amaravati Civil Hospital had not been working since December 2003 due to a compressor problem, and the problem still had not been rectified three and a half years later at the time of the DIR's visit in April 2007. The MSACS appeared unwilling to cover the cost of repairs to replace the compressor and gas filling, which was estimated at INR 35,200.<sup>135</sup>
- The staff at the KGMU Hospital blood bank in Uttar Pradesh appeared uninformed of the Nuaire contract termination. From the blood bank's records, the KGMU Hospital continued writing to Nuaire's servicing agent, Nutek Instruments, up to April 2005 to carry out the AMC, years after Nuaire's contract had been terminated. In April 2005, the blood bank arranged for the repair of its freezer through a locally identified firm and used their own funds to pay for the repair.

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<sup>134</sup> Site Visit Report by Spectrum Scientific engineer (Aug. 27, 2001).

<sup>135</sup> Service Report by AMSA, S. No. AMSA-S 227 (Mar. 17, 2006).

- According to staff at the NPFC of the KEM Hospital in Bangalore, the calibration and other preventive maintenance on the -80° C and -40° C freezers were performed by an outside third party at regular time intervals, usually twice a year. The NPFC paid for all the maintenance charges out of the proceeds of plasma component sales.
- According to the Janakalyan blood bank staff, the -80° C freezer had been out of order for more than a year as of the date of the DIR's visit.<sup>136</sup> The blood bank sent a request to MSACS and NACO for repairs, but had not received any response. All previous maintenance visits prior to the equipment breakdown were made by various local servicing companies at the expense of the blood bank.
- The equipment files at the Cuttack Central Red Cross blood bank in Orissa also showed that AMC obligations had not been carried out on either of its freezers since their installation. The OSACS asked NACO as late as March 2007—six years after the delivery of the freezers—to clarify the status of the AMC on both contracts. The OSACS also asked to clarify whether it should make its own arrangements for the AMC.<sup>137</sup> NACO appeared not to have taken any action as of the date of the DIR visit.

*Remi Failed to Service Its Blood Bank Refrigerators.* Based on its visits to blood banks that received refrigerators supplied by Remi and the documentation provided to the DIR, the DIR observed that Remi consistently failed to meet its AMC and warranty obligations under its contracts.

- The Rashtrorathana Parishad blood bank experienced delays in servicing of the two blood bank refrigerators it received from Remi.<sup>138</sup> The blood bank had asked Remi as early as May 2004 to replace one of the refrigerators, as the problems were affecting the operations of the blood component separation facility.<sup>139</sup> However, the problem continued to persist through 2007, preventing the blood bank from storing blood during that time.<sup>140</sup> At the time of the DIR's visit, this refrigerator was not in service even though the AMC period was still in effect.

<sup>136</sup> Inventory records of blood bank equipment supplied by NACO and MSACS at Janakalyan blood bank.

<sup>137</sup> Letter from Dr. Annapurna Mishra, Deputy Director, Blood Safety OSACS, to Joint Director, Blood Safety NACO, ref. No. 2210/OSACS.

<sup>138</sup> These refrigerators were supplied under IFB 17-5.

<sup>139</sup> K. S. Narayana, manager, Rashtrorathana blood bank, letter to Shri Sunil Saraf, director, Remi (Reference No. RBB/26/14-05) (May 17, 2004).

<sup>140</sup> K. S. Narayana, manager, Rashtrorathana blood bank, e-mail to Mr. Y. Srinivasan, Remi (Mar. 20, 2007).

- The staff of the JNM College Hospital in Raipur also reported a lack of proper servicing on its Remi-supplied refrigerators.<sup>141</sup> They could recall only one visit by Remi's representative to repair one of the two refrigerators since their installation in 2001. They told the DIR that on other occasions, the breakdowns were fixed by the hospital's mechanic.
- At the Amaravati Civil Hospital in Maharashtra, according to hospital staff, one of the Remi refrigerators had been out of order since at least October 2006.<sup>142</sup> The lab technician at the facility for the last 10 years could not recall any visits by Remi after installation of the refrigerators, except for one visit in early 2004. The DIR could not verify this assertion because the equipment file did not contain any AMC service reports for either of the refrigerators.

*Spectrum Scientific Failed to Service Its Water Bath.* Based on its site visits to two blood banks, the DIR observed that Spectrum Scientific failed to comply with its AMC obligations pursuant to a contract for the supply of a water bath, which is used to thaw plasma.

- From verbal reports by staff at the Rashtrothana blood bank and records from the institution's equipment file, the DIR learned that a Spectrum Scientific representative has visited Rashtrothana only once during the AMC period for preventive maintenance. Rashtrothana wrote to Spectrum Scientific reminding the company of the conditions of contract to provide maintenance.<sup>143</sup> A third-party firm now carries out the preventive maintenance and equipment calibration for Rashtrothana.
- Staff at the Amaravati Civil Hospital stated that Spectrum's representative only serviced its water bath once a year. From the hospital's files, the DIR counted only one AMC visit in 2004 and two visits in 2006. However, the company appeared to have at least partially fulfilled its AMC obligations, as hospital staff reported to the DIR that the equipment had rarely broken down since installation.

*Care BioMedicals Refused to Honor Maintenance Obligations.* The DIR found that one supplier of -80° C freezers, Care BioMedicals, refused to honor its AMC obligations unless it was paid an additional sum. Specifically, the Rashtrothana Parishad blood bank, which had received a -80° C freezer from Care BioMed-

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<sup>141</sup> These refrigerators were supplied under IFB 2-5.

<sup>142</sup> This refrigerator was supplied under IFB 2-5.

<sup>143</sup> Rashtrothana Parishad blood bank, letter to Spectrum Scientific, Ref. No. RBB/280/2006-07 (Nov. 22, 2006).

icals, informed HLL in January 2007 that Care BioMedicals had asked for INR 5,000 before “submitting its proposal for AMC.”<sup>144</sup> Clause 2.1 of the Notification of Award, however, provided for a four-year AMC schedule (after an initial two-year warranty period) at no cost to the end user.<sup>145</sup> Because Rastrotthana’s request for service fell within this four-year period,<sup>146</sup> Care BioMedical’s request for additional compensation was in direct violation of its contractual obligations. The DIR could not determine if HLL took any action against the company.

*Disincentive to Honor AMC and Warranty Obligations.* The DIR observed that the manner in which suppliers were paid may have created a disincentive for suppliers to honor their AMC and warranty obligations. The director of the KGMU Hospital in Lucknow explained that once the PSA made the 90 percent payment of the contract value to the supplier upon shipment, the supplier had little incentive to fulfill further obligations, including warranty and the AMC. This was because the local servicing agents designated by the supplier received the remaining 10 percent of the contract value upon equipment installation—thus, there was no incentive for either party to attend to its service obligations. The director added that the five percent performance guarantee that the suppliers were required to furnish to the PSA upon signing its contract did not serve as a sufficient safeguard against the risk of poor or non-performance by the suppliers or their agents, as the cost of the guarantee was already built into the 90 percent upfront payment, and was easily recovered through the higher cost of equipment.

### 5. *Discrepancies between Invoices and Contract Awards*

The DIR noticed two instances where the amount billed in a contractor’s invoice did not comport with the contract award.

*Remi Submitted an Invoice with a Unit Price that Exceeded the Contract’s Unit Price.* Based on its review of the records at the Amaravati Civil Hospital, the DIR observed that Remi invoiced a greater amount for two refrigerators than was specified in its contract. Specifically, the unit price listed on the invoice Remi submitted to the hospital was INR 77,662 (net of sales tax), while the unit price under its contract was INR 69,450.<sup>147</sup> Thus, for the two refrigerators supplied to the hospital, Remi appears to have billed an additional INR 16,424 over and above the price it

<sup>144</sup> K.S. Narayana, manager, Rashtrrothana blood bank, letter to HLL, Ref. No. RBB/334/06-07 (Jan. 3, 2007).

<sup>145</sup> Notification of Award for contract CW-CM-9213-C-017/02-O-C-001-00 (Jul. 19, 2002).

<sup>146</sup> According to Rashtrrothana’s records, the freezer was installed on May 10, 2003. The letter of award provides that the AMC period takes effect 24 months after the date of installation, or 30 months from the date of supply, whichever is earlier. Assuming that the shorter 24-month period applies here, the AMC period for Care Bio-Medicals under this contract was May 10, 2005, through May 10, 2009.

<sup>147</sup> Letter of Award for IFB 2-5, Ref. no. CW-CM-9213-C-002/01/e-o-C-001-00 (Oct. 6, 2000).

should have billed under the terms of its contract. Because the DIR did not have access to NTPC's payment records for this supplier, it could not verify the actual amount billed.

*Spectrum Scientific Submitted an Invoice with a Unit Price Substantially Less than the Contract's Unit Price.* From its review of the records at Amaravati Civil Hospital, the DIR noted that on an invoice submitted by Spectrum Scientific to the hospital for the supply of a water bath, the unit price listed was INR 15,100 (net of sales tax), despite the fact that the contract unit price was INR 51,000.<sup>148</sup> Because the DIR did not have access to NTPC's payment records for this supplier, it could not verify the actual amount paid.

## **International Procurement of Test Kits and Blood Bank Equipment**

Based on a review and analysis of contracts for diagnostic test kit and blood bank equipment under the NACP II, the DIR found several indicators of problems in the international procurement process, including, for example, questions as to the procurement and credibility of the PSA, patterns of long delays between the bid opening and the contract award dates, and unusual pricing patterns. The same companies whose goods were found by the DIR to have performed poorly also successfully participated in many of these problematic procurements. As explained below, these procurement issues might indicate corruption in the procurement process.

### **A. Questions as to the Procurement and Credibility of the PSAs**

The NACP II had two PSAs: NTPC, which was the project's PSA during 1999 to 2005; and HLL, which was the PSA from 2005 until the close of the project. The DIR found that NTPC was awarded its contract for an amount that included additional reimbursable expenses beyond those accounted for in its bid submission, and that a number of companies questioned NTPC's competency. In addition, the DIR found that HLL may have had a conflict of interest while serving as PSA. Issues of credibility with respect to PSAs might reflect corruption in the PSA selection process, and may have contributed to corruption in the procurements managed by these PSAs.

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<sup>148</sup> Letter of Award for IFB 2-4, Ref. no. CW-CM-9213-C-02/OA/04-008 (Oct. 5, 2000).

*Unexplained Reimbursable Expenses in NTPC's Contract Award and Complaints as to Its Competency.* NTPC appeared to have received unwarranted payments in its award as a PSA. NTPC submitted, and NACO awarded, a contract to the company consisting of INR 68.2 million (USD 1.5 million) in lump-sum compensation, INR 133.3 million (almost USD 3 million) in reimbursable expenses incurred locally, and a “foreign ceiling” of USD 150,000.<sup>149</sup> However, NTPC's bid submission had already accounted for reimbursable expenses, so the reimbursable expenses awarded by NACO—which amounted to more than double the contract's value—appeared to be an additional sum over and above the contract award amount.

With respect to NTPC's qualification, two witnesses interviewed by the DIR, including an equipment distributor and a test kit supplier that had participated in NACP II tenders, questioned NTPC's competency. The equipment distributor stated that NTPC lacked knowledge about the equipment to be procured, and were often educated about the technical specifications by distributors. The test kit supplier described NTPC as not being conversant in medical tests. Moreover, according to the Minutes of the Meeting of the Technical Evaluation Committee, NTPC had past experience on five Bank-supported projects, but did not have any health-sector or AIDS-related project experience.<sup>150</sup> Thus, the selection of NTPC as a PSA appears to be problematic, both in terms of the payments it received and in terms of its qualifications.

*Award of Local Contracts to HLL While Serving as PSA.* On September 30, 2005, NACO contracted with HLL to replace NTPC as PSA until March 30, 2006, the closing date of the NACP II.<sup>151</sup> NACO's selection of HLL raises questions, since HLL had already been a supplier of goods under the NACP II and since the Bank had already expressed reservations with the selection of HLL as a PSA. The Bank had previously asserted that serving as both a procurement agent and a supplier of goods for the project would amount to a conflict of interest, in violation of Bank guidelines for selecting consultants.<sup>152</sup> Moreover, the Bank had previously recommended terminating HLL in the RCH and Rajasthan Health Systems Develop-

<sup>149</sup> Contract for Procurement Agent's Services between National AIDS Control Organization, Ministry of Health and Family Welfare, Government of India and National Thermal Power Corporation Ltd., p. 32 (Sep. 13, 1999).

<sup>150</sup> Minutes of the Meeting of Technical Evaluation Committee held on Mar. 30–31, 1999, to evaluate Technical Proposals of Procurement Agency for 2nd National AIDS Control Project, pp. 7–8.

<sup>151</sup> The Contract for Consultancy Services between NACO and HLL had a commencement date of Apr. 1, 2005, but was executed on Sep. 30, 2005.

<sup>152</sup> Guidelines: Selection and Employment of Consultants by World Bank Borrowers, p. 4 (Jan. 1997, revised Sep. 1997, Jan. 1999, and May 2002).

ment Projects after an independent assessment found serious deficiencies in the capacity of HLL to perform as a PSA.<sup>153</sup>

An NACP II project team member explained that there was a clear understanding that HLL would not receive any Bank-financed contracts while acting as the PSA on the NACP II. The DIR analysis of the NACO-procured contracts confirmed that HLL was not awarded any contracts. Nonetheless, based on local procurement information provided by three different SACS (Maharashtra, Karnataka, and Orissa), the DIR determined that HLL won 10 contracts procured locally by the SACS while it was serving as the PSA on NACP II, nine of which were awarded before the project closing date of March 30, 2006.<sup>154</sup>

Thus, the DIR noted issues related to the selection of PSAs under the NACP II that merit further attention.

## **B. Indicators of Fraud and Corruption in the Procurement of Test Kits**

In its review of diagnostic test kit contracts procured by NACO, the DIR noted three indicators of fraud and corruption in the procurement process: (1) patterns of long delays between bid openings and contract awards; (2) apparent avoidance of prior-review thresholds; and (3) unusual pricing patterns. In addition, the DIR notes that test kit contract awards were concentrated among a handful of five companies, even though many companies in India appeared to be capable of producing the test kits—for example, at least 20 diagnostic manufacturers are registered with the Indian Central Drugs Standard Control Organization. The DIR notes that two of the five companies that won test kit contracts, Zhongshan and Span Diagnostics, also exhibited substantial test kit performance problems, as discussed previously in this Chapter.

### *1. Patterns of Long Delays between Bid Openings and Contract Awards*

For the majority of test kit procurements, there was a noticeably long period between the bid opening and the contract award dates. More than 50 percent of contracts took more than 200 days to award. Given that the bid security validity period was generally around 90 days, these 200-plus-day periods were consistently longer than anticipated. While a delay in awarding a contract can be explained by

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<sup>153</sup> Communication from Michael Carter to Mr. G.S. Sandhu, Principal Secretary of Health, Government of Rajasthan (Aug. 8, 2005).

<sup>154</sup> Among these 10 contracts won by HLL were MDACS/3339 for the supply of condoms, valued at INR 8,125,000; and KSAPS/DD-BS/6A/2005-06 for the supply of blood bags, valued at INR 2,964,870.

a host of factors—a lengthy technical evaluation, the need for further documentation from bidders, etc.—a pattern of consistent delays suggests potential corruption in the procurement process. Repeated delays provide procurement officials and bidders time to devise and implement corruption schemes if the officials and bidders are prone to such actions. These repeated delays in the NACP II merit closer attention.

Indeed, the DIR received reports from participating bidders that improper kickback negotiations took place under the NACP II that may have caused these long, periodic procurement delays. The DIR learned from a confidential test kit supplier that the NACP II bidding process often involved “following up” by the bidder after the bid opening in order to lobby for the contract. The witness claimed that NACO frequently contacted companies with which it had good relationships for what it called “bid clarifications” after the bid opening, but before the technical evaluations. According to the witness, this was the bidder’s opportunity to try to influence contract awards. An equipment supplier also mentioned such “negotiations” in the process before the award of contract that sometimes involved “going back and forth.” These witnesses stated that final payments were made to officials only when the contract was certain. These statements further suggest that the procurement delays observed by the DIR are the result of fraud and corruption.

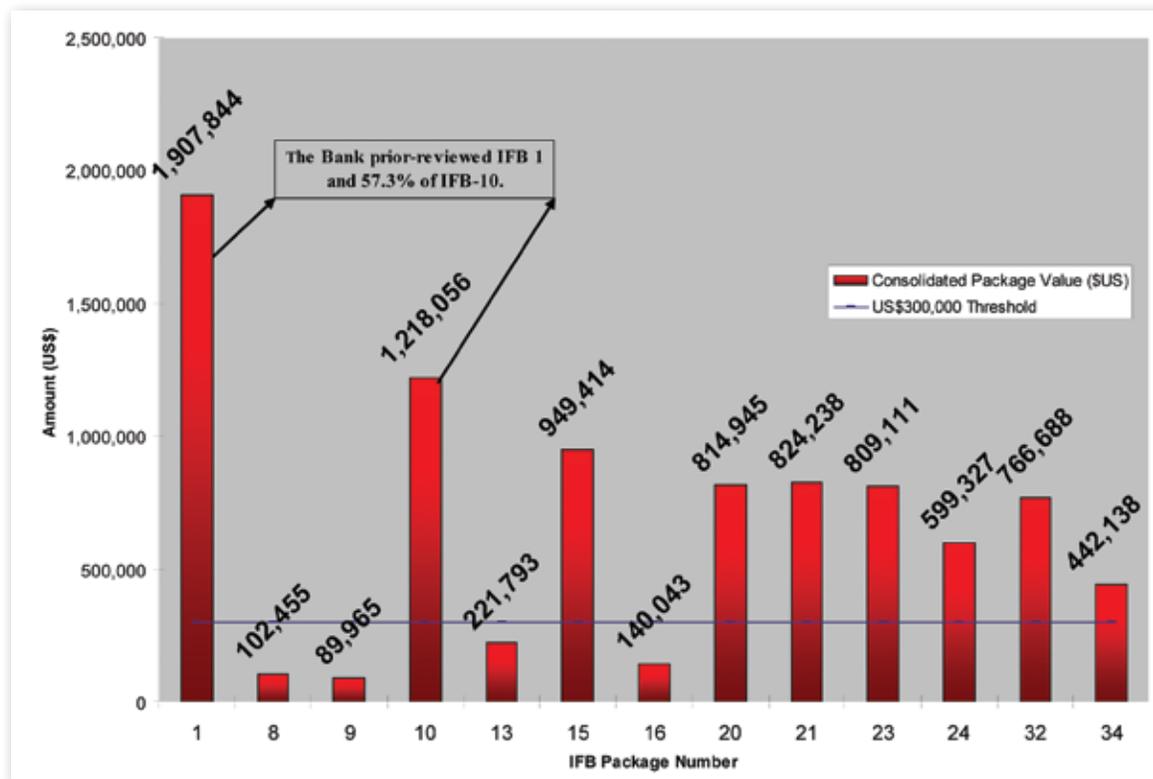
## *2. Avoidance of Prior-Review Thresholds*

In a number of tenders procured by NTPC, the DIR observed what appeared to be split purchasing, which occurs when a quantity of goods and services are divided or not consolidated for the purpose of evading a threshold limit or competitive-bidding requirement. The DIR’s analysis showed that the cumulative value of the separate schedules within six test kit packages procured by NTPC amounted to more than USD 300,000—the amount that triggers prior review by the Bank—and that one of these packages was valued at over USD 1 million.<sup>155</sup> NTPC divided five of these packages into multiple contracts that were each valued at less than USD 300,000, and the Bank prior reviewed contracts from two of these packages. The necessity for splitting these packages appeared questionable because an earlier Bank-financed procurement (IFB 1-1) and later non-Bank-financed procurements (IFB 32, Schedules 1–8, and IFB 34) were not consolidated. There was no information available to the DIR to verify whether the Bank had approved the breakdown of these packages into multiple contracts below the prior-review threshold, though

<sup>155</sup> The six schedules were IFBs 10, 15, 20, 21, 23, and 24. IFB 10 was for USD 1.2 million.

the Bank requested the practice be stopped in February 2006. The six packages valued at over USD 300,000 procured by NTPC are set out in Figure 2.

**Figure 2. Comparison of Aggregated Test Kit Schedules Procured by NTPC against the Prior-Review Threshold**



Source: DIR analysis of NACO test kit contracts on the NACP II.

### 3. Unusual Pricing Patterns

*Unusual Correlation between Zhongshan’s Bid Prices and the Cost Estimate.* The DIR observed a highly unusual pattern in the bid prices submitted by Zhongshan for IFB 24, under which it won four of the eight schedules. Except for Schedule I, Zhongshan’s US dollar bid prices were numerically identical to the Indian rupee cost estimates divided by 100. Table 15 shows Zhongshan’s bid price against the INR cost estimate.

**Table 15. Similarity of Bid Price and Cost Estimate in Bid by Zhongshan**

IFB 24 Schedule	Cost Estimate (INR)	Number of Tests	Zhongshan Bio-Tech Bid Price (USD)
I	8,747,520	437,376	104,970.24
II	6,727,680	336,384	67,276.80
III	5,483,520	274,176	54,835.20
IV	6,543,360	327,168	65,433.60
V	6,174,720	308,736	61,747.20
VI	5,468,160	273,408	54,681.60
VII	1,158,400	577,920	115,584.00
VIII	9,300,480	465,024	93,004.80

Source: DIR analysis of IFB 24 Schedules I to VII.

This consistently unusual relationship between Zhongshan's bid and the cost estimate suggests that the company may have communicated with procurement officials before it submitted its bid and before the cost estimate was made public. This finding indicates possible fraud and corruption in the procurement process.

### **C. Indicators of Fraud and Corruption in the Procurement of Blood Bank Equipment**

The DIR observed the following indicators of fraud and corruption in its review of blood bank equipment contracts: (1) low bid submission rates; (2) the awarding of a contract at an inflated price; (3) unusual pricing patterns; and (4) preferential treatment accorded to certain bidders by the PSA. As was the case with diagnostic-test-kit procurements, two companies whose equipment performed poorly or was not properly serviced—Nuair and Remi—won contracts in these problematic procurements.

The DIR also notes that three equipment suppliers received the majority of contracts in the NACP II: Kendro Laboratory Products India (P) Ltd. (Kendro) for refrigerated centrifuges, Remi for blood-bank refrigerators, and Nuair for -40° C and -80° C deep freezers. These three companies were awarded a combined total of 13 contracts to supply 454 units of equipment, amounting to USD 2.1 million, with each company winning the vast majority of contracts under the procurements for its respective good. While a limited number of companies winning the majority of contracts for a particular good can have a legitimate explanation, the virtual monopolization by Remi, Nuair, and Kendro of the tenders for their respective goods seems unusual and merits further review.

### 1. *Low Bid Submission Rates and High Non-responsive Rates*

The bid submission rate is the rate at which companies that purchased bidding documents submit bids. The non-responsive rate is the rate at which companies that actually submitted bids are declared non-responsive by the contracting authority. Low bid submission rates and high non-responsive rates can be indicative of collusive arrangements, with non-cooperating bidders either being dissuaded from submitting bids or being eliminated from consideration by the contracting authority for a variety of technical reasons. The three centrifuge contracts won by Kendro, the two refrigerator contracts won by Remi, and the two freezer contracts won by Nuair exhibited unusually low bid submission rates and the exclusion of otherwise qualified bidders. While a low bid submission rate can be expected on procurements of highly technical goods, the equipment procured in these tenders—refrigerators and freezers—is not complex enough to warrant such low bid submission rates, and thus indicates collusive arrangements.

*Schedules Awarded to Kendro.* Kendro was awarded three contracts to supply a total of 88 refrigerated centrifuges totaling USD 1.3 million between 2000 and 2003.<sup>156</sup> Although at least 14 bidders purchased the bidding documents on each of the tenders, each time less than 20 percent of the bidders who purchased the bidding documents actually submitted a bid. The procurements also exhibited high non-responsive rates. The bid submission and non-responsive rates for three contracts won by Kendro are outlined in Table 16.

**Table 16. Bid Submission and Non-responsive Rates on Kendro Refrigerated Centrifuge Contracts**

Kendro refrigerated centrifuges	IFB 2A-1	IFB 17-1	IFB 25-1
Number of units	66	18	4
Number of bidding documents sold	46	22	14
Number of bids submitted	6	4	2
<b>Bid submission rate</b>	<b>13.0%</b>	<b>18.2%</b>	<b>14.3%</b>
Number of non-responsive bidders	5	3	1
<b>Non-responsive rate</b>	<b>83.3%</b>	<b>75.0%</b>	<b>50.0%</b>

Source: DIR analysis of NACO on refrigeration equipment contracts on the NACP II.

The limited number of bidders on these tenders may have been a function of restrictive technical specifications. For example, although the technical specifica-

<sup>156</sup> These were CW9213/NACO/IFB-02/A/Item I, CW9213/NACO/IFB-17/Schedule I, and CW9213/NACO/IFB-25/Schedule I, awarded on Nov. 30, 2000, Apr. 5, 2002, and Dec.30, 2003, respectively.

tions for IFB 2A-1 were subsequently amended, the Bid Evaluation Committee (BEC) stated that “it is not expected to have better competitive bidding in case of re-tendering with same specifications as there are only few manufacturers who can meet this specification.”<sup>157</sup> Prospective bidders on IFB 2A-1 queried the technical specifications, raising doubts as to the conventionality of the specifications as stated in the bidding documents. Another bidder claimed that the specifications were designed such that “all manufacturers except one specific German manufacturer should be specifically disqualified on specifications.”<sup>158</sup>

*Schedules Awarded to Remi.* There were two contracts awarded to Remi for the supply of 204 units (102 per contract) of blood-bank refrigerators.<sup>159</sup> Both contracts won by Remi had low bid submission rates of approximately 30 percent, and high non-responsive rates of more than 50 percent, as indicated in Table 17.<sup>160</sup> Again, such findings might merit further attention.

**Table 17. Bid Submission and Non-responsive Rates on Remi Instruments Blood Bank Refrigerator Contracts**

	IFB 02A-5	IFB 17-5
Number of bidding documents sold	46	32
Number of bids submitted	15	10
Bid submission rate	32.6%	31.3%
Number of non-responsive bidders	8	6
Non-responsive rate	53.3%	60.0%

Source: DIR analysis of NACO on refrigeration equipment contracts on the NACP II.

*Schedules Awarded to Nuair.* There were two contracts awarded to Nuair in October 2000 for 84 units of -40° C and -80° C deep freezers totaling USD 489,972. Both procurements exhibited low bid submission rates and high non-responsive rates. In both contracts, all of the bidders were eliminated except for Nuair, which did not submit the lowest bid price. The reasons for disqualifying other bidders included insufficient bid guarantees, inadequate warranty periods, and non-compliance with the technical specifications.<sup>161</sup> The bid submission and non-responsive rates on these contracts are illustrated in Table 18.

<sup>157</sup> Evaluation Report for procurement of Refrigerated Centrifuge (66 nos.) under IFB-02A (ICB) (Oct. 4, 2000).

<sup>158</sup> *Ibid.*

<sup>159</sup> IFB 2-5 and IFB 17-5.

<sup>160</sup> Evaluation Report for Package (v) “Blood Bank Refrigerators”—102 nos. (Sep. 27, 2000); Evaluation Report for Package (v) “Blood Bank Refrigerators”—102 nos. (Mar. 4, 2002).

<sup>161</sup> Evaluation Report for Package (ii) “Deep Freezers (-80 deg. C)—42 nos. (Sep. 6, 2000).

**Table 18. Bid Submission and Non-responsive Rates on Nuaire Deep Freezer Contracts**

Nuaire deep freezers	IFB 2A-2 -80° C	IFB 2A-3 -40° C
Number of units	42	42
Number of bidding documents sold	46	46
Number of bids submitted	15	12
<b>Bid submission rate</b>	<b>32.6%</b>	<b>26.1%</b>
Number of non-responsive bidders	14	11
<b>Non-responsive rate</b>	<b>93.3%</b>	<b>91.7%</b>

Source: DIR analysis of NACO on refrigeration equipment contracts on the NACP II.

The presence of an apparent pattern of low bid submission rates and high non-responsive rates suggests underlying problems in the procurement process.

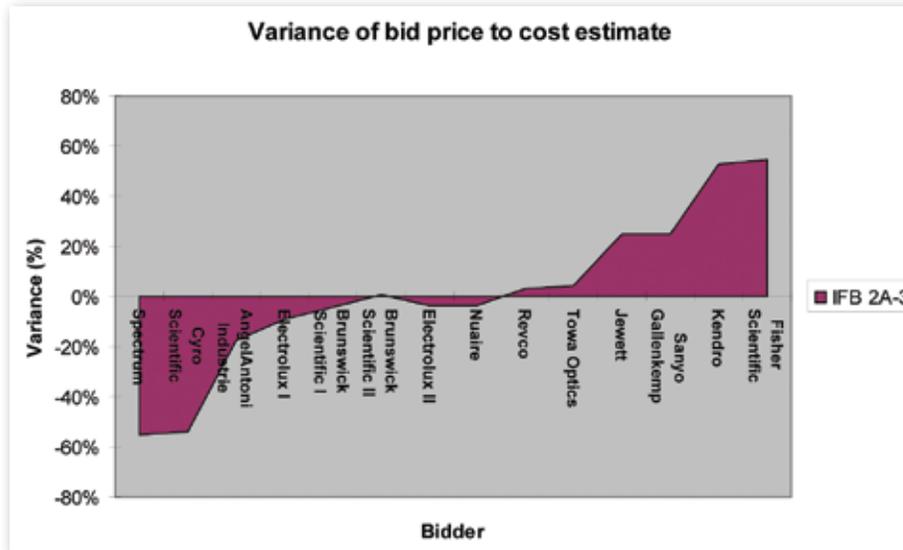
### *2. Contract Awarded to Nuaire at Inflated Price*

By comparing the unit prices on a freezer contract awarded to Nuaire in 2000 to the unit prices on contracts awarded to other suppliers in 2002 and 2004, the DIR observed that Nuaire may have been awarded the contract in 2000 at an inflated price. Specifically, in 2000, NTPC awarded Nuaire a contract under IFB 2A-3 for 42 -40° C deep freezers at a unit price of INR 318,768 (USD 7,083); in 2002 and 2004 however, other suppliers were awarded contracts for significantly fewer -40° C freezers at unit prices 23 percent (in the case of the 2002 contract) and five percent (in the case of the 2004 contract) less than the unit price on Nuaire's contract. These lower prices were achieved despite inflation and despite the significantly lesser quantities procured, raising questions as to the competitiveness of the procurement for the contract won by Nuaire.

### *3. Unusual Pricing Patterns*

As in its review of procurements for diagnostic test kits, the DIR detected an unusual pricing pattern in a procurement for blood bank equipment. On IFB 2A-3, which was awarded to Nuaire for the supply of -40° C deep freezers, an analysis of the differential between the cost estimate and bid prices shows that the bidders that submitted bids below the cost estimate were all disqualified, while the bidder that submitted a bid close to the cost estimate was awarded the contract. This variance between the bid price and the cost estimate is illustrated in Figure 3.

**Figure 3. Distribution of Variance in Bid Prices to Cost Estimates on IFB 2A-3**



Source: DIR analysis of NACO on refrigeration equipment contracts on the NACP II.

The DIR observes that it is an unlikely coincidence that Nuaiire submitted a bid that was almost identical to the cost estimate and was awarded the contract.

#### 4. Preferential Treatment Accorded to Particular Bidders by NTPC

The DIR found instances where NTPC appeared to have given preferential treatment to certain bidders.

*Last-minute Change to Annual Maintenance Contract Obligations of Nuaiire.* According to the BER, Nuaiire submitted AMC prices for four years of service for the contracts it won.<sup>162</sup> The pre-award minutes, however, indicate that this four-year requirement was changed to two years.<sup>163</sup> This AMC period change was reflected in the Letter of Award.<sup>164</sup> It was unclear whether this change was initiated by Nuaiire or NTPC. However, the DIR notes that if Nuaiire had proposed a two-year AMC rather than a four-year AMC in its original bid submission, it should have been disqualified for non-compliance with the bid specifications.

<sup>162</sup> *Ibid.*; and Evaluation Report for Package (iii) “Deep Freezers (-40° C)”—42 nos. (Aug. 20, 2000).

<sup>163</sup> Minutes of Pre-Award Meeting for Item (III): “42 Nos. Deep Freezers -40° C” (Oct. 6, 2000) for IFB No. CW-9213/NACO/IFB-02/A of Second National AIDS Control Project of NACO (undated); and Minutes of Pre-Award Meeting for Item (II): “42 Nos. Deep Freezers -80° C” (Oct. 6, 2000) for IFB No. CW-9213/NACO/IFB-02-/A of Second National AIDS Control Project of NACO (undated).

<sup>164</sup> Letter of Award Ref. No. CW-CM-9213-C-02/0A/03-008 (Oct. 6, 2000); Letter of Award Ref. No. CW-CM-9213-C-02/0A/02-008 (Oct. 6, 2000).

*Reduction of Kendro's AMC Obligations after Award of Contract.* The DIR observed that NTPC informed at least two blood banks—Amaravati Civil Hospital blood bank and the Cuttack Central Red Cross blood bank—that AMC service visits by Kendro would be made every six months, as opposed to quarterly visits as required by the Letter of Award.<sup>165</sup> NTPC offered no explanation for this reduction in Kendro's AMC obligation. This change in requirements suggests favored treatment in the procurement process.

*Failure of Remi to Adjust Its Contract Price after Switching to Less Expensive Components.* In the minutes of the post-bid discussions for IFB 17-5 (under which Remi won a contract to supply 102 refrigerators), Remi stated that, although its bid price included the use of imported components, it could not ultimately include such components because of importation difficulties.<sup>166</sup> However, because of a lack of any further documentation, the DIR could not determine whether Remi ever provided NTPC with an adjusted price reflecting the use of local components. The DIR notes that it appeared that no such adjustment had been made, as the contract price in the Notification of Award for IFB 17-5 was the same as Remi's bid with the imported components.<sup>167</sup> Thus, it appears that Remi received favored treatment in the award of contracts.

## **Local Procurement of Test Kits and Blood Bank Equipment**

Because much of the procurement under NACP II was decentralized by NACO to the SACS, the DIR reviewed the local procurement by the SACS of test kits and blood-bank equipment. These local procurements were performed using either NCB, national shopping, local shopping,<sup>168</sup> or direct contracting procurement methods. Local and national shopping are particularly susceptible to fraud and corruption because companies are invited by the SACS to submit quotations, thereby limiting competition from the outset. In line with this concern, the DIR found indicators of fraud and corruption in the vast majority of contracts it reviewed.

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<sup>165</sup> O.P. Khorwal, letter to Project Manager, NACO, to Officer-in-Charge, Central Red Cross Blood Bank, and to Officer-in-Charge, Amaravati Civil Hospital (Irvin) Blood Bank, Ref. No. CW-CM-9213-C-05 (Nov. 13, 2003); Letter of Award for IFB 2-1, Ref. No. CW-9213/NACO/IFB-02/A/Item 1 (Nov. 30, 2000).

<sup>166</sup> Minutes of post-bid discussions for "Blood Bank Refrigerator"—102 nos. (Oct. 25, 2002) for IFB No. CW-CM-9213/NACO/IFB-017 for Second National AIDS Control Project of NACO (undated).

<sup>167</sup> Notification of Award Ref. No.: CW-CM-9213-C-017/05-0-C-001-00 (Feb. 3, 2003).

<sup>168</sup> Local shopping is used to purchase off-the-shelf goods or standard specification commodities of small value. Guidelines, Procurement under IBRD Loans and IDA Credits, Section II, 3.5

## A. Summary of Findings

Based on the information provided to the DIR, a total of 1,473 contracts<sup>169</sup> for a value of INR 243 million (USD 5.4 million) were issued by the SACS and Regional Circles in Maharashtra, Orissa, and Karnataka.<sup>170</sup> The DIR reviewed 217 contracts valued at INR 119 million (USD 2.7 million), and found that 178 of them (equivalent to 82 percent) had one or more indicators of fraud and corruption for a total value of INR 105 million (USD 2.4 million), equivalent to 89 percent of the value of the contracts reviewed. DIR findings in Maharashtra, Karnataka, Orissa, and Chhattisgarh indicate an elevated risk to local procurement funds. This risk appears to have gone undetected by the Bank's traditional supervision methods and procurement post-reviews.

Table 19 summarizes the number and value of the contracts reviewed by the DIR in each location, the number and value of contracts in each location that were associated with indicators of fraudulent and corrupt practices, and the overall percentage of such contracts in terms of both number and value, as compared against the universe of contracts reviewed.

**Table 19. Summary of NACP II Locally Procured Contracts Reviewed by the DIR**

Locations	Contracts Reviewed	Value INR	Contracts with Indicator	Value Contracts with Indicators INR	Percent Reviewed in Number	Percent Reviewed in Value
Nagpur Regional Circle	27	5,817,616	17	3,687,476	63	63
Nasik Regional Circle	25	2,842,726	18	2,102,171	72	74
Pune Regional Circle	47	20,250,437	35	17,728,397	75	88
OSACS	51	21,597,421	44	17,023,022	86	79
KSAPS	53	60,832,351	50	57,246,184	94	94
CGSACS	14	7,403,225	14	7,403,225	100	100
Total	217	118,743,776	178	105,190,475	82	89

<sup>169</sup> These include all types of procurement methods. The DIR focused on national and local shopping, and on national competitive bidding when available.

<sup>170</sup> Data provided to the DIR about Chhattisgarh are not included in these aggregate totals as the data imported into the DIR database were not sufficiently reliable.

Table 20 summarizes the types of indicators of fraud and corruption that the DIR observed in the various locations visited.

**Table 20. Summary of Indicators of Fraudulent and Corrupt Practices in Locally Procured Contracts**

Type of Indicator	States	# Districts	Total # Contracts
Inadequate record keeping	Karnataka	1	76
	Maharashtra	1	
	Orissa	1	
Similarities in language and presentation in competing bids	Chhattisgarh	1	66
	Karnataka	1	
	Maharashtra	3	
	Orissa	1	
Unreasonable delays between bid closing and contract award dates	Karnataka	1	30
	Orissa	1	
Substantial variation in inter-bidder unit prices	Karnataka	1	14
	Orissa	1	
Contract awarded to a company that was not a bidder	Maharashtra	1	14
Incorrect method of procurement	Karnataka	1	13
	Orissa	1	
Separate bidders with identical phone number	Chhattisgarh	1	14
	Karnataka	1	
	Maharashtra	2	
Substantial variation in intra-bidder unit prices	Orissa	1	12
Contract splitting	Orissa	1	12
Inappropriately low number of bidders	Karnataka	1	10
	Orissa	1	
Separate bidders with same address	Chhattisgarh	1	10
	Karnataka	1	
	Maharashtra	1	
Inadequate advertising	Orissa	1	8
Sequential bid securities issued by the same bank on the same date presented by separate companies	Karnataka	1	9
	Orissa	1	
Contract values identical/close to estimate	Chhattisgarh	1	9

*continued*

Type of Indicator	States	# Districts	Total # Contracts
Inadequate time to prepare quotations	Chhattisgarh	1	8
Unit rate quoted by bidders related to a common formula	Karnataka	1	7
	Maharashtra	1	
Affiliation among bidders	Chhattisgarh	1	6
	Maharashtra	1	
	Orissa	1	
Favorable treatment accorded to a bidder	Orissa	1	2
Goods supplied not in accordance with specifications	Chhattisgarh	1	2
Limited number of companies winning the overwhelming majority of contracts	Maharashtra	1	1
Disbursements made to someone other than the contractor.	Orissa	1	1
Failure to disqualify bidders that do not meet the pre-qualification requirements	Karnataka	1	1
Product produced by a different manufacturer than the one indicated in quotation	Karnataka	1	1
Substantial disparity between the thoroughness of the winning bidders' bid package and losing bids	Karnataka	1	1

The DIR found that contracts may contain one or a combination of multiple indicators.

## B. Nagpur Regional Circle (Maharashtra)

Contract data received from the Nagpur Regional Circle showed 420 local shopping procurements between September 1999 and November 2006, for a total value of INR 17 million (USD 388,150).<sup>171</sup> The DIR reviewed 27 of the larger contracts and found one or more indicators in 17 contracts for a total value of INR 3.7 million (USD 81,944) (63 percent by value).

<sup>171</sup> Note that the review team observed that the number of contracts actually awarded might be lower than 420.

The frequency of indicators found in the contracts with indicators is set out in Table 21.

**Table 21. Frequency of Indicators in Contracts Procured by the Nagpur Regional Circle**

Location	Type of Indicator	Frequency of Indicator
Nagpur Regional Circle	Incorrect method of procurement	8
	Similarities in language and presentation in competing bids	5
	Inadequate record keeping	4
	Separate bidders with identical phone number	4

Examples of some of the indicators observed at the Nagpur Regional Circle are discussed below:

*1. Similarities in Language and Presentation in Competing Bids*

In Nagpur, the DIR identified five contracts where bidders' quotations demonstrated strong similarities.<sup>172</sup> In particular, the DIR found similarities in quotations for contracts ultimately awarded to Gayatri Medicals Amaravati, Kiran Agencies Nagpur, Chandrashekhar Agencies Amaravati, Priest Pharma. Amara-vati, and Adroit Pharmaceuticals (P) Ltd. For example, quotations submitted by Priest Pharma and Gayatri for the same contract contained a very similar item-listing template and use of the same introductory sentence (and punctuation): "with reference to your above letter we are pleased to quote our lowest possible rates for supply of following items," and the same closing sentence (and punctuation): "Quoted rates are nett [sic] and inclusive of all taxes and FOR Nagpur." The DIR views it to be highly unlikely that the quotations of non-cooperating bidders would exhibit identical language and punctuation.

*2. Separate Bidders with Same Phone Number Bidding for Same Contract*

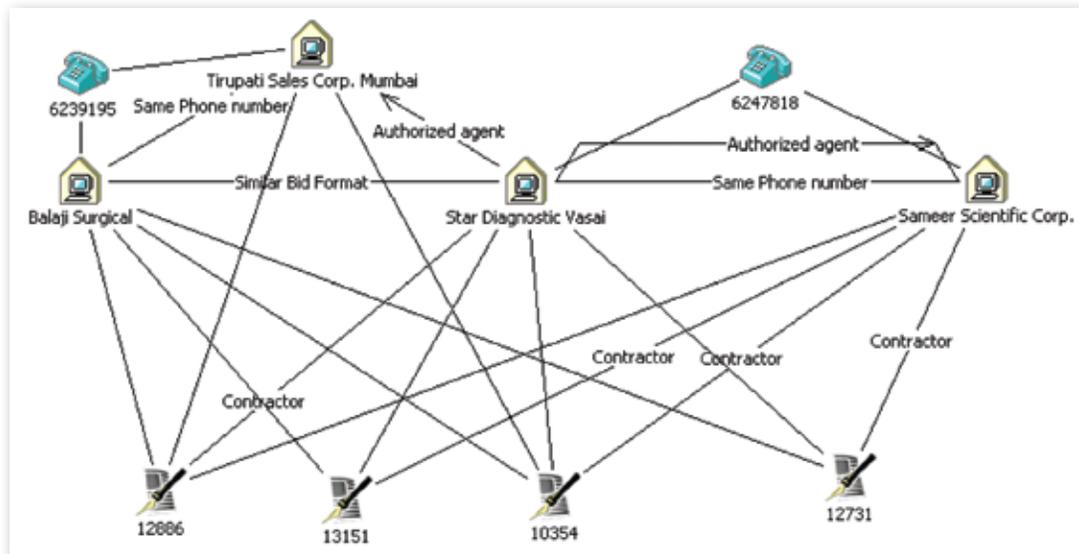
The DIR found four Nagpur contracts where different bidders shared the same phone number.<sup>173</sup> Sameer Scientific Corp., Tirupati Sales Corp., Star Diagnostic Vasai, and Balaji Surgical submitted quotations for four contracts. Sameer Scien-

<sup>172</sup> World Bank Contract Numbers (WBCNs) 11115, 11722, 13306, 14482, and 13332. All contracts entered or imported into the DIR database were assigned a WBCN that, in combination with the project acronym, is a unique and standard identifier for each contract. For each WBCN where indicators were identified, the DIR drafted detailed working case memos.

<sup>173</sup> WBCNs 10354, 12731, 12886, and 13151.

tific Corp. was awarded three contracts and Star Diagnostic Vasai one. The DIR found that Sameer Scientific Corp. and Star Diagnostic Vasai share the same fax number and Star Diagnostic Vasai's envelope address shows the same street name as Sameer Scientific Corp.'s address. The review team also found that Tirupati Sales Corp. and Balaji Surgical share the same phone number. Other contract files showed links between these companies, such as indicators that Star Diagnostic Vasai designated Sameer Scientific Corp. and Tirupati Sales Corp. as its authorized agents. These links are illustrated in Figure 4:

**Figure 4. Bidders with Same Phone Number and Addresses Bidding on Same Contracts Procured by the Nagpur Regional Circle**



Tirupati Sales Corp., Balaji Medical, Sameer Scientific Corp., and Star Diagnostic Vasai competed for numerous NACP II contracts. Data provided by the Regional Circle showed 25 contracts for INR 1,698,850 (USD 37,752) in which all four companies competed, and an additional 52 contracts for the value of INR 2,449,305 (USD 54,429) in which Balaji Medical, Sameer Scientific Corp., and Star Diagnostic Vasai competed against each other between September 2000 and July 2003. The total amount for these 77 contracts is INR 4,148,155, equal to USD 92,181.<sup>174</sup>

<sup>174</sup> Out of these 77 contracts, the review team analyzed seven contracts, namely WBCNs 10354, 12886, 12159, 14706, 11472, 12731, and 13151.

### 3. *Incorrect Method of Procurement*

The DIR identified eight contracts out of 27 indicating the use of incorrect procurement methods, i.e., use of direct contracting or rate contracting<sup>175</sup> instead of local shopping.<sup>176</sup> The value of these contracts is INR 1,364,902 (USD 30,330), equal to 23.5 percent of the value of all contracts reviewed, and equal to 37 percent of the 17 contracts with indicators.

## C. Nasik Regional Circle (Maharashtra)

Nasik Regional Circle contract data indicated that 114 local shopping contracts were issued between December 1999 and August 2006, for total value of INR 7.5 million (USD 166,845). The DIR reviewed 25 contracts valued at INR 2.8 million (USD 63,172) and found that 18 contracts (72 percent by number) had one or more indicators, for a total value of INR 2.1 million (USD 46,715) (74 percent by value).

The frequency of indicators found in the contracts with indicators is set out in Table 22.

**Table 22. Frequency of Indicators in Contracts Procured by Nasik Regional Circle**

Location	Type of Indicator	Frequency of Indicator
Nasik Regional Circle	Similarities in language and presentation in competing bids	18
	Separate bidders with identical phone number	8
	Separate bidders with same address	5
	Affiliation among bidders	3

Examples of some of the indicators observed at the Nasik Regional Circle are discussed below:

#### 1. *Similarities in Language and Presentation in Competing Bids and Affiliations among Bidders*

In Nasik, the DIR found identical formatting, calculations, spelling errors, or abbreviation form in two or more quotation on 18 out of 25 contracts reviewed.<sup>177</sup>

<sup>175</sup> Rate contracting is used under the Government of India's procurement rules, whereby at the beginning of a period (typically the financial year), the government officials solicit quotations from suppliers. The selected contractor then agrees to supply the quantities that the officials may call for at a given rate.

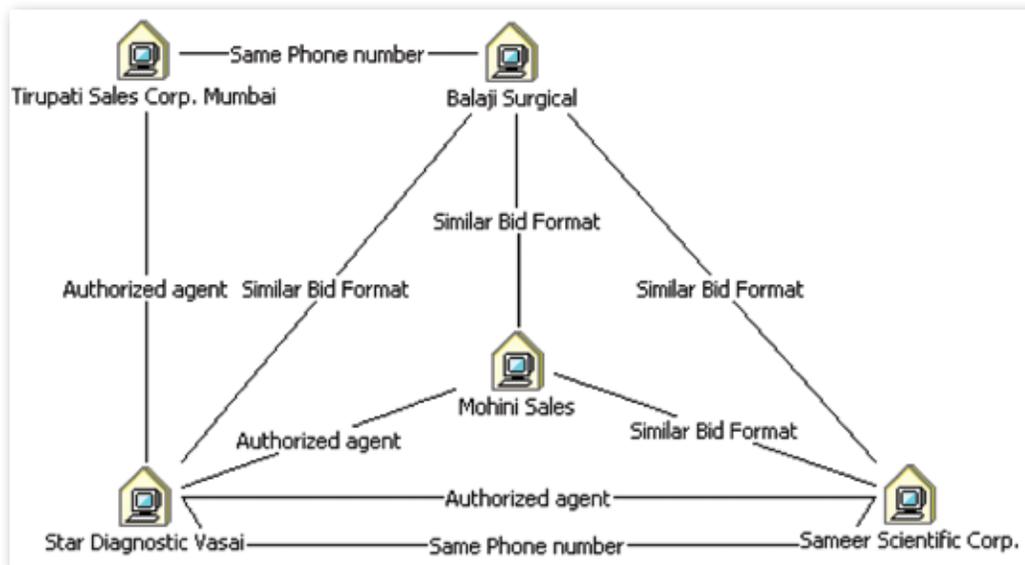
<sup>176</sup> WBCNs 14706, 12159, 14295, 11472, 11159, 13241, 13119, and 11242.

<sup>177</sup> WBCNs 12539, 13942, 11129, 13932, 14206, 10789, 11113, 12543, 12640, 10508, 11016, 11185, 14630, 11908, 13167, 12135, 11818, and 13019.

The value of these contracts is INR 2.1 million (USD 46,715), equal to 74 percent of the value of all 25 contracts reviewed.

For example, the review team observed a number of similarities—such as similar bid formats and identical phone numbers—in the quotations submitted by Mohini Sales Corporation, Balaji Surgical, and Sameer Scientific Corp.<sup>178</sup> In addition, Balaji Surgical and Sameer Scientific Corp. have additional links to Star Diagnostic Vasai and to Tirupati Sales Corp. These five companies participated in 59 contracts for the supply of hospital and laboratory items. The links among these five companies are set out in Figure 5.

**Figure 5. Links among Companies Bidding on Same Contracts Procured by Nasik Regional Circle**



In addition, the DIR found indicators of affiliation among bidders in three contracts for the supply of test kits.<sup>179</sup> For example, Biolab Diagnostics (I) Pvt. Ltd. and Biotron Laboratories submitted quotations under all these contracts, and Biolab was awarded WBCN 11908. The DIR found a letter by Biolab indicating that Biotron was authorized to supply its orders and to collect payments. The procurement file also contained a delivery certificate issued by Biotron for the items awarded under the contract to Biolab.

<sup>178</sup> WBCN 11113.

<sup>179</sup> WBCNs 10508, 11016, and 11908.

## 2. *Separate Bidders with Identical Phone Number and Address Bidding for Same Contract*

The DIR identified eight contracts where companies submitting quotations under the same contract were linked to each other by the same phone number.<sup>180</sup> Under five of the eight contracts where bidders shared the same phone number, bidders were also found to share the same address.<sup>181</sup> These contracts were valued at INR 721,937 (USD 16,043), equal to 25 percent of the value of all 25 contracts reviewed and 34 percent of the value of the 18 contracts with identified indicators. For example, under WBCN 10789, the bid documents for Biolab Diagnostics and Biotron Laboratories showed the same phone number, 8088243.

### D. Pune Regional Circle (Maharashtra)

The DIR team reviewed 47 contracts at the Pune Regional Circle, valued at INR 20.3 million (equivalent to USD 450,010). The review found indicators in 35 out of 47 contracts (74.5 percent by number and 87.5 percent by value). The DIR notes that a significant proportion of the contracts reviewed were sought by companies whose quotations exhibited substantial similarities in language and presentation, decreasing the likelihood that this oddity was merely overlooked by Regional Circle officials.

The frequency of indicators found in the contracts with indicators is set out in Table 23.

**Table 23. Frequency of Indicators in Contracts Procured by the Pune Regional Circle**

Location	Type of Indicator	Frequency of Indicator
Pune Regional Circle	Similarities in language and presentation in competing bids	33
	Contract awarded to a company that was not a bidder	14
	Unit rates quoted by bidders were related to a common formula	5
	Inadequate record keeping	2
	Contract awarded to bidder different from the lowest evaluated bidder	1

<sup>180</sup> WBCNs 10789, 11129, 11818, 12640, 13019, 13932, 13942, and 14206.

<sup>181</sup> WBCNs 10789, 11129, 11818, 13019, and 13942.

Examples of some of the indicators observed at the Pune Regional Circle are discussed below:

### *1. Similarities in Language and Presentation in Competing Bids*

The DIR identified 33 Pune contracts out of 47 where quotations from different bidders had strong similarities.<sup>182</sup> These contracts were valued at INR 15.2 million (USD 337,887), equal to 75 percent of the value of all 47 contracts reviewed and 86 percent of the value of the 35 contracts with identified indicators.

### *2. Contracts Awarded to a Company that Was Not a Bidder*

The review team found instances of contract awards to contractors that were not invited to submit quotations and that did not actually submit quotations. On September 21, 2002, the following five companies were invited to submit quotations for 14 contracts<sup>183</sup>: Sameer Scientific Corp., Balaji Surgical, Mohini Sales Corporation, Biolab Diagnostics, and Harmony Biomedicals. However, all 14 contracts were awarded to Star Diagnostics Vasai despite the fact that the request for quotation (RFQ) did not indicate that Star Diagnostics Vasai was invited to submit quotations. Further, a comparative statement created by the Pune Regional Circle for 17 blood bank items lists only Sameer Scientific Corp., Balaji Surgical, and Mohini Sales Corporation as having submitted bids.

### *3. Unit Rates Quoted by Bidders Were Related to a Common Formula*

The DIR identified five instances in which companies submitted quotations where the unit rates quoted appeared to be related to a common formula.<sup>184</sup> These contracts were valued at INR 6.9 million (USD 154,755), equal to 34 percent of the value of all 47 contracts reviewed and 39 percent of the value of the 35 contracts with identified indicators. For example in the case of WBCN 11102, the DIR found that rates quoted by the first three bidders—Balaji Surgical, Sameer Scientific Corp., and Mohini Sales Corporation—increased in common increments of INR 0.40, as set out in Table 24.

<sup>182</sup> WBCNs 10654, 11397, 11642, 12490, 12583, 12600, 12691, 13007, 13108, 13451, 13496, 13544, 13693, 13748, 14059, 14951, 11050, 11102, 11603, 12871, 14345, 10218, 10998, 11701, 12044, 12993, 14442, 14941, 14983, 11169, 12051, 14432, and 15075.

<sup>183</sup> WBCNs 10654, 11397, 11642, 12490, 12583, 12691, 13007, 13108, 13451, 13544, 13693, 13748, 14059, and 14951.

<sup>184</sup> WBCNs 11050, 11102, 14345, 14432, and 15075.

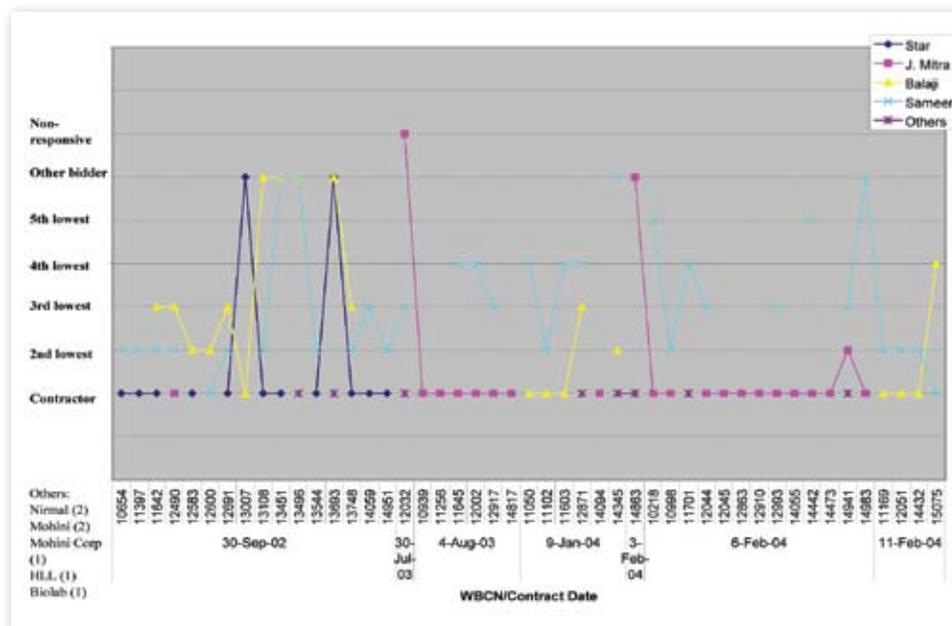
**Table 24. Bid Prices Related to a Common Formula in Pune Regional Circle Procurement**

Company	Balaji	Sameer	Mohini	Star Formulation
Item	Contractor			
Plastic tube C cap	3.10	3.50	3.90	4.00

*4. Limited Number of Companies Winning the Overwhelming Majority of Contracts*

The DIR also analyzed the 47 contracts to identify instances where particular companies appeared to be winning the overwhelming majority of contracts.<sup>185</sup> The analysis showed that Star Diagnostic Vasai and J. Mitra & Co. Ltd. (J. Mitra) were awarded the vast majority of blood bag contracts from 2002 to 2003. Star Diagnostic Vasai was awarded the majority of contracts in 2002, while J. Mitra was awarded the majority of contracts in 2003. Indeed, Star Diagnostic Vasai and J. Mitra won the vast majority of contracts for which they submitted quotations. In contrast, Sameer Scientific bid on 34 contracts and was awarded only two. This analysis is represented in Figure 6.

**Figure 6. Contract Distribution for Blood Bags and Laboratory Items from 2002 to 2004**



<sup>185</sup> The DIR found that the data supplied were unreliable. Based on the data provided by the DACS, on Sep. 30, 2002, Mohini Sales Corporation and Balaji Surgical were awarded seven contracts each, and Sameer Scientific Corp. was awarded two contracts. However, upon verification of the procurement file, the review team found that 16 items were awarded to Star Diagnostics Vasai and one to Sameer Scientific Corp.

## E. The OSACS

The DIR team reviewed 51 OSACS-procured contracts in Bhubaneswar, Orissa, valued at INR 21.6 million (equivalent to USD 479,940). The review found one or more indicators in 44 out of 51 contracts (86 percent by number and 79 percent by value) for a total value of INR 17 million (equivalent to USD 378,289). Of particular prevalence at the OSACS were inadequate record keeping and unreasonably long delays between the bid closing and contract award dates.

The frequency of indicators found in those contracts with indicators is set out in Table 25.

**Table 25. Frequency of Indicators in Contracts Procured by the OSACS**

Location	Type of Indicator	Total
OSACS	Inadequate record keeping	28
	Unreasonable delays between bid closing and contract award dates	23
	Substantial variation in inter-bidder unit prices	12
	Substantial variation in intra-bidder unit prices	12
	Contract splitting	12
	Inadequate advertising	8
	Inappropriately low number of bidders	8
	Sequentially numbered bid securities issued by the same bank on the same date presented by separate companies	6
	Incorrect method of procurement	5
	Affiliations among bidders	2
	Favorable treatment accorded to a bidder	2
	Lack of competitive bid procedure due to insufficient bidders	1
	Similarities between language and presentation of competing bids	1
	Disbursements made to someone other than the contractor	1

Examples of some of the indicators observed at the OSACS are discussed below:

### 1. *Inadequate Record Keeping*

The DIR identified 28 contracts out of 51 where key documents—such as quotations, RFQs, evaluation sheets, and comparative statements—were not in the procurement file. The value of these contracts is INR 9.7 million (USD 216,850),

equal to 45 percent of the value of all 51 contracts reviewed and 57 percent of the value of the 44 contracts with identified indicators.

## 2. *Inter-bidder and Intra-bidder Unit Prices Vary Substantially*

The DIR identified 12 contracts where the unit prices offered by competing bidders varied dramatically and/or the unit prices submitted by the same bidder for the same item differed substantially across contracts.<sup>186</sup> The value of these contracts is INR 2.4 million (USD 53,104), equal to 11 percent of the value of all 51 contracts reviewed and 14 percent of the value of the 44 contracts with identified indicators. An example of competing bidders offering substantially different unit prices for the same item is set out in Table 26.

**Table 26. Substantial Variation in Inter-bidder Unit Prices in OSACS Procurements (Values in INR)**

Item/ Unit Cost	Minimum	Company	Maximum	Company	Percent Variation
Tag (good quality, pkt of 100 pcs)	5.25	Dash Ent.	58	Divine Impex	1005
Two-hole punching machine	27	Divine Impex	64	Dash Ent.	137
Gum solution (250 ml)	13	Shiva	28	Bholanath	115
Liquid soap (100 ml)	5.25	BSSR RCMS	21.92	Bholanath	318
Towel (45 x 60 cm)	32	Medico Int'l.	275	Bholanath	759
Plastic buckets	85	Divine Impex	675	Sayoni Cuttack	694
Needle destroyer	1415	Medico Int'l.	3850	Sayoni Cuttack	172
Distilled water—5 ltr.	45	Divine Impex	142	Sayoni Cuttack	216
Plastic vial	1.9	Sayoni Cuttack	8.44	Mediplus	344

The DIR compared unit costs for the same items under contracts WBCN 12473, 10009, 12114, 15031, 14045, 10745, 14213, and 10865 (Group 1) and contracts WBCN 12463, 11898, 10794, and 10649 (Group 2), and found that the unit prices submitted by the same bidder for the same item differed dramatically across contracts. This is set out in Table 27.

<sup>186</sup> WBCNs 15031, 12473, 12114, 10009, 12463, 11898, 10794, 10649, 14213, 14045, 10745, and 10865.

**Table 27. Substantial Variation in Intra-Bidder Unit Prices in OSACS Procurements (Values in INR)**

Item/ Unit Cost	Company	Group 1	Rank	Group 2	Rank	Percent Variation
Microtips for micro pipettes	Bholanath	0.70	Bidder	0.36	Bidder	-49
lab. Footwear size 7–10, colour white	Sayoni	79	Bidder	30	Contractor	-62
Towel, minimum size 45x60 cm.	Bholanath	275	Bidder	30	Contractor	-89
Hard glass test tube	Bholanath	7.50	Bidder	3.10	Bidder	-59
Rolling register size 20	Bholanath	59	Bidder	74	Contractor	25
Rolling register size 16	Bholanath	47	Bidder	60	Contractor	28
Tag (good quality, pkt of 100pcs)	Bholanath	17	Bidder	9	Contractor	-47
Two-hole punching machine	Bholanath	39	Bidder	44	Contractor	13
Calculator	Bholanath	145	Contractor	415	Contractor	186

### *3. Sequentially Numbered Bid Securities Issued by the Same Bank on the Same Date Presented by Separate Companies*

An indicator of collusion is the presence of sequentially numbered bid securities issued by the same bank on the same date and submitted under the same contract by competing companies. The DIR identified six Bhubaneswar contracts out of 51 possessing this indicator valued at INR 1.4 million (USD 30,828), equal to 6.4 percent of the value of all 51 contracts reviewed and 8 percent of the value of the 44 contracts with identified indicators.<sup>187</sup> For example, an examination of files for five contracts for the supply of HIV kits showed that two companies submitted sequential bid securities as shown in Table 28.

**Table 28. Sequential Bid Securities Submitted by Competing Bidders in OSACS Procurements**

Company	Bid Sec N	Bid Sec Date	Bid Bond Co
Science 'N' Science	551766	11-Nov-02	State Bank of India
Anand Associate	551767	11-Nov-02	State Bank of India

<sup>187</sup> WBCNs 14235, 10915, 10484, 14128, 11528, and 11552

#### 4. *Unreasonable Delays between Bid Closing and Contract Award Dates*

The DIR identified 23 contracts of 51 where there appeared to be an unreasonable delay between the date of bid closing and the date of contract award. The value of these contracts is INR 7.6 million (USD 169,834), equal to 35 percent of the value of all 51 contracts reviewed and 45 percent of the value of the contracts with identified indicators.<sup>188</sup> Examples of these unreasonable delay periods are set out in Table 29.

**Table 29. Unreasonable Delays in Contract Awards by the OSACS**

WBCN	Contract Description	Bid Closing Date	Contract Date	Days to Award
12473	Aprons and towel for VCTCs	10-Mar-05	06-Jul-05	118
10009	Stationery items for VCTCs like register, pen, pencil, paper	10-Mar-05	06-Jul-05	118
12114	Consumables for VCTCs like tissue paper and Dettol liquid soap	10-Mar-05	06-Jul-05	118
15031	Consumables for VCTCs like gloves, syringes, spirit, cotton, etc.	10-Mar-05	06-Jul-05	118
14045	VCTC stationery like pen, paper, etc.	10-Mar-05	17-Sep-05	191
10745	Aprons and towels for VCTC	10-Mar-05	17-Sep-05	191
14213	VCTC consumables like gloves, syringes, cotton, etc.	10-Mar-05	17-Sep-05	191
10865	VCTC stationery like pen, paper, etc.	10-Mar-05	17-Sep-05	191

#### 5. *Inadequate Advertising*

The DIR team observed that the OSACS may have inadequately advertised eight out of 51 contracts. The value of these eight contracts is INR 1.4 million (USD 31,552), equal to 6.6 percent of the value of all 51 contracts reviewed and 8.3 percent of the value of the 44 contracts with identified indicators.<sup>189</sup>

For example, for WBCNs 12463, 11898, 10794, and 10649 for the supply of office stationery, the OSACS placed only one tender notice in English in “one leading Oriya daily” on May 30, 2005.<sup>190</sup> There were a number of aspects to this notice that may have limited the response by bidders. First, the procurement method was

<sup>188</sup> WBCNs 10334, 13960, 12473, 10009, 12114, 15031, 11912, 11044, 15087, 11263, 13763, 10649, 10794, 12463, 11898, 14045, 10745, 14213, 10865, 10001, 12727, 13378, and 13638.

<sup>189</sup> WBCNs 15031, 12473, 12114, 10009, 12463, 11898, 10794, and 10649.

<sup>190</sup> From the procurement file, the DIR identified the newspaper as *The Samaya*, which is printed in Oriya only. The tender notice failed to specify the procurement method, but requested a bid security of four percent, giving the impression that this tender was following NCB procedures.

not identified in the tender notice. Second, publication in an Orissa daily paper written in the Oriya language would not reach a national-level audience. Third, because the OSACS wrote the notice in English, it was also less likely to be read by local companies in Orissa, as Oriya is the predominant language there. Finally, the tender notice states that the list of items to be procured could only be obtained from the OSACS office between 4 PM and 5 PM “of any working days.”

### 6. *Contract Splitting*

The DIR team identified four groups of contracts—totaling 12 out of the 51 that were reviewed by the DIR in Orissa—where contracts for the same items were awarded to the same contractors around the same time. The value of these 12 contracts is INR 2.4 million (USD 53,104), equal to 11 percent of the value of the contracts reviewed and 14 percent of the value of the 44 contracts with identified indicators.<sup>191</sup>

For example, the OSACS awarded three contracts within a three-month span—two of which were awarded within two days of each other—to the same contractor (Sayoni Cuttack) for the supply of the same goods.<sup>192</sup> The total amount for these contracts was USD 42,556, which is above the USD 30,000 threshold established by the Credit Agreement for local shopping. Individually, however, all of the contracts were less than USD 30,000. It should be noted, though, that this was the only group of contracts with a total value that exceeded the local shopping threshold.

### 7. *Inappropriately Low Number of Bidders*

The Bank’s Procurement Guidelines require that a minimum of three bidders participate in local-shopping procurements.<sup>193</sup> The DIR identified eight contracts out of 51 where only one or two bidders participated in procurements for off-the-shelf drugs and test kits. The value of these eight contracts is INR 4.8 million (USD 107,004), equal to 22 percent of the value of all 51 contracts reviewed and 28 percent of the value of the 44 contracts with identified indicators.<sup>194</sup>

### 8. *Incorrect Method of Procurement*

The project agreement allows for direct contracting if the goods supplied will cost USD 5,000 or less. The DIR identified five contracts out of 51 where direct

<sup>191</sup> WBCNs 12114, 11898, 10865, 10009, 10794, 14045, 12473, 12463, 10745, 15031, 10649, and 14213.

<sup>192</sup> WBCNs 15031, 10649, and 14213.

<sup>193</sup> Guidelines: Procurement Under IRBD Loans and IDA Credits, Section 3.5 (Jan. 1995, Revised Jan. and Aug. 1996, Sep. 1997, and Jan. 1999).

<sup>194</sup> WBCNs 11282, 11784, 12176, 13763, 11044, 11358, 13378, and 10001.

contracting had been utilized to purchase goods valued at more than USD 5,000.<sup>195</sup> The value of these five contracts is INR 3.2 million (USD 70,466), equal to 15 percent of the value of all 51 contracts reviewed and 19 percent of the value of the 44 contracts with identified indicators. For example, the OSACS issued a contract to Span Diagnostics on December 18, 2002, for 350 HIV Rapid kits, which appeared to be procured by direct contracting. This contract, valued at INR 537,500 (USD 11,946.7), exceeded the USD 5,000 direct-contracting threshold established in the project agreement. In addition, the OSACS issued this contract just six days after awarding a contract, under national shopping, to Span Diagnostics for 50 of the exact same kits at the exact same unit price.<sup>196</sup>

#### *9. Favorable Treatment Accorded to a Bidder*

The DIR found indicators of favorable treatment toward particular contractors. For example, LG Chemical Ltd. (LG Chemical) and J. Mitra were awarded separate contracts for 250 test kits originating from the same tender for the procurement of 500 kits.<sup>197</sup> The review of the comparison sheet showed that seven companies submitted quotations: J Mitra, LG Chemical, GlaxoSmithKline, Ranbaxy, Sayoni Cuttack, Stimulus Specialty Diagnostic, and Science 'N' Science. J. Mitra quoted the lowest price of INR 2,496, while LG Chemical quoted a price of INR 2,527. However, instead of awarding one contract for all 500 kits to J. Mitra, on January 10, 2003, the OSACS awarded one contract for 250 kits to J. Mitra, and another contract for 250 kits to LG Chemical at the unit price quoted by J. Mitra.

## **F. The KSAPS**

The DIR team reviewed 53 contracts at the KSAPS in Bangalore, Karnataka, valued at INR 60.8 million (equivalent to USD 1.4 million); 50 out of 53 of these contracts (94 percent by number and 94 percent by value) were found to have one or more indicators, for a total value of INR 57.2 million (equivalent to USD 1.3 million). The DIR noted that problems with inadequate record keeping were of particular prevalence at the KSAPS.

The frequency of indicators found in the contracts with indicators is set out in Table 30.

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<sup>195</sup> WBCNs 14128, 12176, 11912, and 11044.

<sup>196</sup> WBCNs 14128, and 14235.

<sup>197</sup> WBCNs 10335 and 13841. Findings on these contracts are based on the data provided by the OSACS and the observation by the DIR during contract review. The procurement file did not contain the quotations submitted by the bidders. Copies of the procurement documents for these contracts were not provided to the DIR.

**Table 30. Frequency of Indicators in Contracts Procured by the KSAPS**

Location	Type of Indicator	Frequency of Indicator
KSAPS	Inadequate record keeping	36
	Unreasonable delays between bid closing and contract award dates	7
	Similarities in language and presentation in competing bids	5
	Sequential bid securities submitted by separate companies	3
	Inappropriately low number of bidders	2
	Unit rate quoted by bidders related to a common formula	2
	Substantial variation in interbidder unit prices	2
	Separate bidders with same address	1
	Separate bidders with identical phone number	1
	Failure to disqualify bidders that do not meet the prequalification requirements	1
	Substantial disparity between the thoroughness of the winning bidders' bid package and losing bids	1
	Product produced by a different manufacturer than the one indicated in quotation	1

Examples of some of the indicators observed at the KSAPS are discussed below:

### 1. *Inadequate Record Keeping*

The DIR identified 36 contracts out of 53 where key documents—quotations, bid securities, comparative statement, and minutes of bid openings—were missing from the procurement file.<sup>198</sup> The lack of such documents seriously hampered the DIR's contract review. The value of these contracts is INR 42.6 million (USD 946,729), equal to 70 percent of the value of all 53 contracts reviewed and 74 percent of the value of the 50 contracts with identified indicators.

<sup>198</sup> WBCNs 14145, 11111, 12414, 12171, 15253, 15252, 15251, 15254, 12827, 14594, 14545, 15248, 15249, 15247, 15250, 14452, 11255, 14905, 15256, 12800, 12912, 12884, 14072, 13317, 13764, 15255, 13247, 13971, 11707, 14384, 13303, 14297, 14464, 13356, 11948, and 14276.

### 2. Sequential Bid Securities Issued by the Same Bank on the Same Date Presented by Separate Companies

In Bangalore, the review identified three contracts out of 53 where bidders submitted sequentially numbered bid securities issued by the same bank on the same date.<sup>199</sup> The value of these contracts is INR 4.5 million (USD 100,808), equal to seven percent of the value of all 53 contracts reviewed and eight percent of the value of the 50 contracts with identified indicators. These instances are set out in Table 31.

**Table 31. Sequential Bid Securities Submitted by Competing Bidders in KSAPS Procurements**

WBCN	Date	Description	Company	Bid Sec No:	Bid Sec Date	Bid Bond Co	Role
12414	22-Jan-01	Supply of RTI/STI drugs for FHAC	Vinay Trading Co.	441451	11-Jan-01	Syndicate Bank	Non Responsive
			Sapna Pharmaceuticals	441452	11-Jan-01	Syndicate Bank	Contractor
14441	08-Apr-06	Proc. of HCV kits	Life Associates	216568	09-Mar-06	Punjab National Bank	Contractor
			Rahul Pharma	216569	09-Mar-06	Punjab National Bank	2nd lowest
12761	08-Apr-06	Proc. of blood bags	Life Associates	216567	09-Mar-06	Punjab National Bank	3rd lowest
			Rahul Pharma	216570	09-Mar-06	Punjab National Bank	Contractor

### 3. Unit Rate Quoted by Bidders Related to a Common Formula

In Bangalore, the DIR also found instances where the unit rate of bidders derived from a common formula. For example, as set out in Table 32, bidders for WBCN 11350 for the procurement of nine items of consumables quoted unit rates that appeared to increase in common increments.

<sup>199</sup> WBCNs 12414, 14441, and 12761.

**Table 32. Bid Prices of Competing Bidders Related to a Common Formula in KSAPS Procurements**

Sl. No.	Item description/ Unit cost INR	Indian	Bharath	Avinash	Kohinoor	Sanjay	Δ INR	Notes
2	Test tube U bottom	3.90	3.95	4	3.95	4.05	+5	For all bidders
4	Hand gloves	7.50	7	7.70	7.60	7.40	+0.10	For four bidders: range 7.40 to 7.70
6	Surgical spirit	45	57	47	46	52	+1	For three bidders: range 45 to 47
7	Sodium hypo	370	390	380	380	410	+10	For four bidders: range 370 to 390
8	Surgical cotton	76	75	78	77	70	+1	For four bidders: range 75 to 78
9	Micro pipettes	2,750	2,850	2,800	2,760	2,728	+50	For three bidders: range 2,750 to 2,850

#### 4. Substantial Variation in Inter-bidder Unit Price

The DIR observed substantial variations in the inter-bidder unit prices of competing bids for WBCNs 12800 and 12912, for the procurement of STD drugs. Contract WBCN 12912 was awarded to Brawn Laboratories Limited (Brawn) for eight items, while WBCN 12800 was won by Vijay Agencies. These variations are set out in Table 33.

**Table 33. Substantial Variation in Inter-bidder Unit Prices in KSAPS Procurements**

Sr. N	Item/ Unit Cost INR	Lowest	Company	Rank	Highest	Company	Rank	Percent Variation
4.	Tab. Erthromycin	248.90	Brawn	Contractor	323	Vijay	Bidder	30
7.	Tab. Ciprofloxacin	92.48	Brawn	Contractor	142.55	Elegant	Bidder	54
8.	Cap. Fluconazole	198.40	Brawn	Bidder	656	Vijay	Contractor	231
9.	Tab. Famicyclovir	21	Cipla	Not Available	91.33	Brawn	Not Available	335
10.	Tab. Clotrimazole Vaginal	58	Mahindra	Bidder	350	Vijay	Contractor	503

#### 5. Inappropriately Low Number of Bidders

Although the Bank's Procurement Guidelines require a minimum of three bidders for local shopping procurements, the DIR review identified two contracts out

of 53 where only one or two bidders submitted bids under local-shopping procurements.<sup>200</sup> The value of these contracts is INR 5,170,460 (USD 114,899), equal to 8.5 percent of the value of all 53 contracts reviewed and nine percent of the value of the 50 contracts with identified indicators. Under these contracts, for the supply of drugs, only two Bangalore companies submitted bids—Mars International and Merrell Pharmaceuticals. The DIR found that two contracts were issued on January 18, 2002: the first to Mars International for INR 1,635,776 (USD 36,350); and the second to Merrell Pharmaceuticals for INR 3,534,684 (USD 78,548).

#### *6. Product Produced by a Different Manufacturer than the One Indicated in Quotation*

The DIR observed an instance where a winning bidder supplied HIV test kits manufactured by a different company than was indicated in its bid submission. Specifically, the KSAPS awarded a contract for the supply of HIV Rapid test kits to Eswari Pharmaceuticals, which had indicated in its quotation that the kits were to be manufactured by J. Mitra and had supplied an authorization by J. Mitra to the same effect. However, the DIR found that Eswari Pharmaceuticals' invoice stated that the manufacturer for the test kits was Bio Inc.

### **G. The CGSACS**

The DIR team reviewed 14 contracts at the CGSACS in Raipur, Chhattisgarh, valued at INR 7.4 million (equivalent to USD 164,516), all of which were found to have one or more indicators. Of these 14 contracts, eight had been post-reviewed by the Bank.<sup>201</sup> The DIR also visited some of the companies and was able to collect additional information, such as admissions of affiliations among companies.

The frequency of indicators found in the contracts with indicators is set out in Table 34.

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<sup>200</sup> WBCNs 13473 and 15246.

<sup>201</sup> World Bank Procurement Post Review Supervision Report from Mar. 20–23, 2006.

**Table 34. Frequency of Indicators in Contracts Procured by the CGSACS**

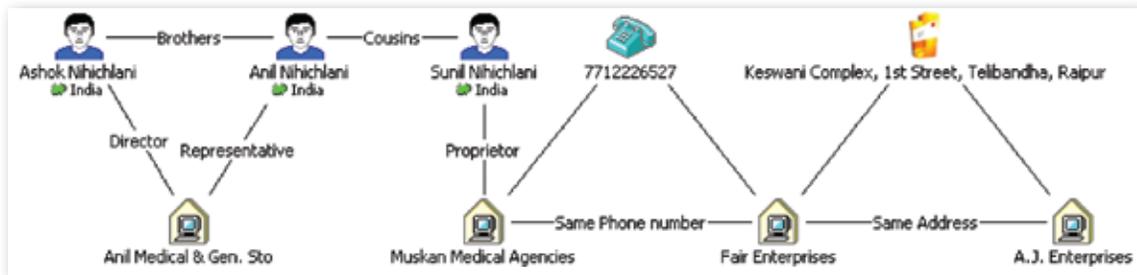
Location	Type of Indicator	Frequency of Indicator
CGSACS	Contract values identical/close to cost estimate	9
	Inadequate time to prepare quotations	8
	Similarities in language and presentation in competing bids	4
	Companies sharing same address	4
	Goods supplied not in accordance with specifications	2
	Companies sharing the same phone number	1
	Affiliation among bidders	1

Examples of some of the indicators observed at the CGSACS are discussed below:

#### 1. *Affiliations among Bidders*

The DIR noted that Anil Medical & General Stores—which won the largest value of contracts from the CGSACS between 2002 and 2006—Fair Enterprises, A.J. Enterprises, and Muskan Medical Agencies appeared to consistently participate in the same procurements and submitted bid documents that featured many similarities. For example, under PO AIDS/CGSACS/PO/2005/23, two out of four bidders, A.J. Enterprises and Fair Enterprises, appeared to share a common address at Keswani Complex, 1st Street, Telibandha, Raipur; while Fair Enterprises and Muskan Medical Agencies listed the same office telephone number (0771-2226527). The DIR visited the listed address for A.J. Enterprises and Fair Enterprises and found that there was no office for Fair Enterprises. Mr. Jagdish Keswani of A.J. Enterprises told the DIR that A.J. Enterprises and Fair Enterprises were the same company. When the DIR visited the offices of Muskan Medical Agencies, its proprietor, Mr. Sunil Nihichlani, told the DIR that he is the cousin of Anil Nihichlani, whose brother is the proprietor of Anil Medical & General Stores. These relationships are set out in Figure 7:

**Figure 7. Links among Companies Bidding on Same Contracts Procured by CGSACS**



*2. Contract Values Identical/Close to the Cost Estimate*

The DIR found that contract values awarded were identical or nearly identical to the cost estimate in nine contracts, eight of which were post-reviewed by the Bank.<sup>202</sup> For seven out of the eight contracts post-reviewed by the Bank, the differential between the contract prices and the cost estimates was less than two percent; four of the eight were 0.1 percent from the cost estimate; and on one contract the contract price was identical to the cost estimate. Moreover, for the contract where the total contract price was identical to the cost estimate,<sup>203</sup> the unit prices for all seven items quoted by the winning bidder, Central Scientific, were identical to the CGSACS estimates, as set out in Table 35.

**Table 35. Unit Costs Submitted by Bidder Identical to Cost Estimate in CGSACS Procurement**

No.	Item	Unit rate quoted by Central Scientific (INR)	NACO estimate used for the procurement (INR)
1	Binocular microscope	20,000	20,000
2	Hot air oven with rotating fan	17,150	17,150
3	Water bath	6,500	6,500
4	Timer clock	1,200	1,200
5	Refrigerator 165 ltr.	6,100	6,100
6	VDRL rotator	2,700	2,700
7	Autoclave	21,500	21,500

Source: CGSACS Procurement File for Purchase Order #90 SACS/PO/12 dated November 6, 2004.

<sup>202</sup> WBCNs 14077, 13815, 15016, 12941, 14322, 14939, 15158, and 14273. The DIR also reviewed PO# AIDS/CGSACS/PO/2006/42, which does not have a corresponding WBCN as the DIR did not obtain data in time for data import into the DIR database.

<sup>203</sup> WBCN 14939.

### 3. *Goods Supplied Not in Accordance with Specifications*

The DIR examined the documentation relating to purchase order number AIDS/CGSACS/PO/2005/17 and found that the CGSACS had purchased HIV Rapid test kits from Anil Medical & General Stores that did not meet the contract's specifications. A condition of the contract was that all test kits should have a minimum shelf life of 11 months at the time of delivery. Yet Anil's invoice to the CGSACS showed that the 1,410 Antigen II kits (70,500 tests) had only five months left before their expiration date.<sup>204</sup>

#### ***Case Study 1. Indicators of Fraudulent and Corrupt Practices on Local Contracts Won by Monozyme India Ltd.***

Based on its examination of the two local procurements under which the MDACS awarded contracts to Monozyme, the DIR found three indicators of possible fraud: (1) MDACS awarded Monozyme the first contract despite the fact that Monozyme's bid appeared to be non-compliant with the contract's technical specifications; (2) Monozyme submitted an apparently fraudulent document in its bid under the first procurement; and (3) under the second procurement, the MDACS apparently awarded Monozyme the contract despite another company's submission of a lower-priced bid for the exact same product.

##### *Monozyme's Submission Appeared to Be Non-compliant with the Technical Specifications*

The first contract won by Monozyme was under a tender issued by the MDACS on September 20, 2003, to procure HIV 3rd Rapid tests. Monozyme submitted a bid on behalf of Standard Diagnostics to supply SD Bioline HIV 1/2 Rapid test kits. Per NACO's instructions in an earlier letter to the SACS, the HIV 3rd Rapid tests could not be a type of Rapid test known as "immunochromatographic" Rapid tests. SD Bioline HIV 1/2, however, is an immunochromatographic Rapid test. In addition, although Monozyme submitted a bid for Standard Diagnostics' HIV Rapid test kits, the DIR found that Monozyme's bid largely contained technical information pertaining to Standard Diagnostics' HIV ELISA test kits.

##### *Certificate of Good Manufacturing Practice (GMP) Submitted by Monozyme Appeared to Be Fraudulent*

There were a number of indicators of fraud with respect to the GMP certificate submitted by Monozyme under the September 20, 2003, tender. First, there was no validity period on the certificate. Second, the document did not carry the

*Continued*

<sup>204</sup> CGSACS Stock Register. Book No. 5 (Year 2005–2006), pp. 1, 5, and 9; Invoice No. 4591 for INR 80,370 (batch No. 50415) (Oct. 27, 2005).

official letterhead of the issuing authority, the Korea Food and Drug Administration. Third, the new valid GMP certificate submitted by Monozyme at the request of MDACS appeared to be a replica of the GMP certificate contained in Monozyme's original bid, with the issue and validity dates stamped in as November 11, 2002, and November 10, 2005, respectively. (See *Photograph 9*.)

*A Monozyme Competitor Was Eliminated Despite Offering the Same Product at a Lower Price*

On the second procurement pursuant to a tender issued by the MDACS on July 15, 2004, Peerless submitted a lower-priced quote than Monozyme for the exact same product—SD Bioline 1/2 HIV Rapid test kits. Nevertheless, MDACS eliminated Peerless and awarded the contract to Monozyme.

Source: DIR Analysis of MDACS/246/PO dated Apr. 16, 2004, and MDACS/4971/PO dated Dec. 9, 2004.

## **Project Reports and Assessments**

The DIR reviewed the project's reports and assessments (*i.e.*, *aides-mémoire*, the ICR, procurement post-reviews, and SOE financial reviews). These documents and reports were reviewed for the purposes of assessing: (1) whether and when the Bank was aware of the indicators identified by the DIR and (2) whether and when the Bank responded to the problems it identified.

### **A. Oversight of NGOs**

The Bank's supervision missions generally identified NGO performance as the key implementation weakness under the NACP II. For example, in its 2003 Mid-Term Review, despite assigning a "satisfactory" rating to both implementation and development objectives, the Bank communicated a concern that the key component of the NACP II—targeting high-risk groups through NGO-led interventions—was not being sufficiently implemented. The *aides-mémoire* reasoned that, despite a six-fold increase in NGO projects since the NACP II's inception, it was "unclear" whether the NGOs were actually reaching the high-risk groups. Coupled with the previously raised concern that many of the NGOs had "weak capacity" and "no experience working on HIV/AIDS," the Bank became concerned whether

“project activities were taking place as planned.”<sup>205</sup> In addition, the Bank determined that many SACS had vacant monitoring and evaluation officer positions and performed inadequate and infrequent field visits, and thus lacked insight into the quality of NGO services.<sup>206</sup>

With respect to the financial management of NGOs, the Bank did not appear to identify the absence of controls at the SACS to monitor and track disbursements to NGOs until late in the project’s life. Specifically, in its review of SOEs from various SACS conducted from June 2005 through 2006, the Bank identified serious financial control weaknesses in a number of SACS. In Chhattisgarh, for example, the Bank noted that auditing procedures were “extremely poor,” and that expenditures and cash advances were not accompanied by supporting documentation or evidence of authorization. The Bank also noted that two NGOs that had been performing services for the CGSACS—SROUT and Atal Shishu Avam Mahila Kalyan Shiksha Samiti—had been making payments for medical supplies in cash, contrary to NACO’s guidelines,<sup>207</sup> which hampered the SACS’ ability to discern whether the NGOs were using project funds for proper purposes.<sup>208</sup> Following its review of the SOEs from the CGSACS—and after the NACP II had closed—the Bank recommended to NACO that the SACS undertake a number of financial reforms, such as the appointment of an auditor to review and verify NGO expenditures.<sup>209</sup>

The Bank identified quite early on the inability of the SACS to monitor NGO performance, and the resultant lack of information on NGO effectiveness. However, there was only minimal information available to the DIR to verify whether any follow-up action was taken by the Bank to resolve these problems. In addition, it did not appear to the DIR that the Bank considered the possibility that NGO performance problems may have been caused by fraudulent or corrupt practices.

Regarding the financial management of NGOs, even though much of the procurement under the NACP II was decentralized to the SACS (primarily for the procurement of NGOs), it was not until the latter stages of the project that the Bank appeared to closely review the SACS’ financial management procedures. Instead, the Bank’s review of financial management under NACP II appeared to primarily

<sup>205</sup> Second National HIV/AIDS Control Project, Mid-Term Review, *Aide-Mémoire*, Jun. 5 to Jul. 3, 2003, p. 13, para. 4.5.13.

<sup>206</sup> *Ibid.*, p. 2, para 4.2, and pp. 18–19, para 4.10.

<sup>207</sup> NACO Costing Guidelines for Targeted Interventions.

<sup>208</sup> Report on Statement of Expenditure Financial Review of Second HIV/AIDS Control Project, Chhattisgarh (Jul. 12, 2006).

<sup>209</sup> Task Team Leader, South Asia Region, World Bank letter to Sujatha Rao, Additional Secretary and Director General, NACO (Jan. 15, 2007).

focus on NACO. However, the DIR notes that the Bank has highlighted the financial management of NGOs as key reform to be instituted in the NACP III.

## **B. Implementation of Contracts**

The Bank's supervision reports devoted limited attention to the performance of the goods supplied to blood banks and VCTCs, which were the recipients of the diagnostic test kits and blood bank equipment procured under the NACP II. To the extent this aspect of the NACP II was evaluated, the Bank appeared to focus primarily on the number of such facilities being built.<sup>210</sup> It was only in its 2003 Mid-Term Review that the Bank noted test kit and blood bank equipment quality problems. Specifically, the Bank found that “[m]uch of the equipment procured during Phase I of the project are unused because of poor maintenance,” and that the “SACS are procuring test kits through local purchases which can adversely influence quality and cost of the kits used in the program.”<sup>211</sup> Thus, the problems identified by the DIR—i.e., that test kits and blood bank equipment were not being timely delivered and maintained, and that some of the goods were of substandard quality—were accorded only limited attention by the Bank.

## **C. Procurement of Test Kits and Blood Bank Equipment**

Throughout its supervision of the NACP II, the Bank identified many of the same procurement problems observed by the DIR and reiterated those finding in its ICR. In its 2003 Mid-Term Review, the Bank was primarily concerned with the delays in the procurement process and rated procurement as “unsatisfactory.”<sup>212</sup> In its 2005 review of the project, the Bank noted that procurement delays persisted under NACP II, and advised that procurements—most of which did not require the Bank's prior review—“should be expedited” in order to qualify for Bank funding before the project's March 31, 2006 closing date.<sup>213</sup> The Bank also expressed particular concern about the hiring of HLL as the project's PSA because it was under investigation for fraudulent and corrupt practices under a previous Bank project.<sup>214</sup> In 2006, concerns about procurement delays—such as excessively long bid validity periods and the length of time from bid closing to contract award—were reiterated again by the Bank, which attributed these delays to a lack of capac-

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<sup>210</sup> See for example., Second National HIV/AIDS Control Project Supervision Mission, *Aide-Mémoire* of Sep. 18–26, 2005, p. 5, para. 11.

<sup>211</sup> Second National HIV/AIDS Control Project, Mid-Term Review, *Aide-Mémoire* of Jun. 5–Jul. 3, 2003, p. 9, para. 4.5.1.

<sup>212</sup> Second National HIV/AIDS Control Project, Supervision Mission, *Aide Mémoire* of Jan. 19–Feb. 5, 2004, p. 6, para. 26.

<sup>213</sup> Second National HIV/AIDS Control Project, Supervision Mission, *Aide Mémoire* of Sep. 18–26, 2005, p. 6.

<sup>214</sup> K. Kostermans, e-mail to Rachid Benmessaoud, (Sep. 9, 2005).

ity at NACO and the SACS.<sup>215</sup> The Bank also noted a number of procurement deficiencies in its post review of local contracts. For example, in its post review of contracts procured by the CGSACS in Chhattisgarh, the Bank found that the CGSACS, in some instances, did not maintain adequate records, used incorrect procurement methods, and allowed an insufficient amount of time for bidders to submit bids.<sup>216</sup>

In general, the Bank's primary concern with respect to the NACP II procurement appeared to be excessively long delays in awarding contracts, as such delays hampered the project's implementation goals. However, the Bank did not appear to view these delays as a function of possible fraudulent and corrupt practices, but rather as a function of a lack of capacity by NACO and the SACS. Indeed, one of the Bank's recommendations to rectify this problem was simply for NACO to "expedite" the procurement process. In contrast, the DIR found that these delays may have either facilitated or been caused by corrupt procurement practices.

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<sup>215</sup> Procurement Capacity Assessment of NACO and other Implementing Agencies under NACP 3 (draft); Global Procurement Consultants Ltd., Mumbai, 4.7, p. 9 (Feb. 2006).

<sup>216</sup> NACP II Procurement Post Review Supervision Report for Chhattisgarh, for period April 1, 2004, to March 31, 2005.

## Photo Gallery

**Photograph 1. Addresses of Purported NGO Offices in Maharashtra, April 16, 2007**



**Photograph 2. Chinese Restaurant at Address of Zhongshan's Distributor Spectra Pharma and Health, New Delhi, March 26, 2007**



**Photograph 3. Storage Temperature of Test Kits (28° C) Well Above Recommended Level, CGSACS Cold Storage Facility, Raipur, Chhattisgarh, April 24, 2007**



**Photograph 4. Expired Span Diagnostics HIV Rapid Test Kits Left on the Rooftop of the KSAPS Building, Bangalore, Karnataka, April 12, 2007**



**Photograph 5. Expired Zhongshan HCV ELISA Test Kits Left on the Rooftop of the KSAPS Building, Bangalore, Karnataka, April 12, 2007**



**Photograph 6. Non-functioning Temperature Chart Recorder of the -80° C Nuaire Deep Freezer, Amaravati Civil Hospital, Maharashtra, April 5, 2007**



**Photograph 7. Non-functioning Temperature Chart Recorder of the -40° C Nuaire Deep Freezer, Janakalyan Blood Bank, Maharashtra, April 10, 2007**



**Photograph 8. Missing Chart Recorder in Remi Blood Bank Refrigerator, Amaravati Civil Hospital, Maharashtra, April 5, 2007**



**Comparison of Monozyme's GMP Certificates from the Original Bid of September 23, 2003 with the Re-submission with Issue and Validity Dates on January 6, 2004.**

*Korea Food & Drug Administration*  
 # 5, No. 6 Jun-dong, Eungpyung-Gu, Seoul, Korea, Tel. 82-2-340-1659, Fax 82-2-383-2870

**Certificate of Good Manufacturing Practice**

Representative	Young Shik Cho	Name Of Manufacturer	Standard Diagnostics, Inc.
Address(Plant)	575-34 Pajang-dong, Janggu-ku, Suwon-si, Kyongsido, Korea 440-290	Registered Production Manager	Yoon Kyoung Lah
Approved Dosage Forms		Approval Date	
Others (In Viro Diagnostics)		February 2, 1999	

It is hereby certified that the above manufacturing plant in which the products are produced is subject to inspections at suitable intervals and the manufacturer conforms to GMP(Good Manufacturing Practice) as recommended by WHO.

27/10/03 7:00 PM  
 7.17.13/10/03  
 Young Chan Kim / Director  
 Pharmaceutical Safety Division  
 Pharmaceutical Safety Bureau  
 Korea Food and Drug Administration

*Korea Food & Drug Administration*  
 # 5, No. 6 Jun-dong, Eungpyung-Gu, Seoul, Korea, Tel. 82-2-340-1659, Fax 82-2-383-2870

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Valid up to 10 NOV 2005  
 Young Chan Kim / Director  
 Pharmaceutical Safety Division  
 Pharmaceutical Safety Bureau  
 Korea Food and Drug Administration



# MALARIA CONTROL PROJECT

## Overview

### Project Objective

Malaria is a disease of the poor: 58 percent of malaria deaths occur among the poorest 20 percent of the world's population, a higher percentage than any other disease of major public health importance.<sup>1</sup> In Southeast Asia, the greatest number of malaria cases is found in India, especially in the lowlands and the remote, inaccessible peripheries of the country.<sup>2</sup> To curb malaria, public health experts advocate attacking the source of the disease—the mosquito infected with the parasite Plasmodium.<sup>3</sup> Vector mosquitoes can be killed by spraying households with insecticide (individual residual spraying, or IRS) and by treating bed nets with the insecticide.<sup>4</sup>

India began to control malaria using IRS in the 1950s, initially with significant success.<sup>5</sup> But the disease began to resurge in the mid-1960s and, by 1997, India was suffering from endemic, severe malaria punctuated by occasional epidemics.<sup>6</sup> Ten states—Andhra Pradesh, Assam, Bihar, Gujarat, Madhya Pradesh, Maharashtra, Orissa, Punjab, Rajasthan, and Uttar Pradesh—accounted for 85 percent of malaria-related deaths and 75 percent of all malaria cases in the country.<sup>7</sup>

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<sup>1</sup> The Global Fund for HIV/AIDS, Tuberculosis, and Malaria, *Disease Report*, p. 36 (date unavailable), [http://www.theglobalfund.org/en/files/about/replenishment/disease\\_report\\_malaria\\_en.pdf](http://www.theglobalfund.org/en/files/about/replenishment/disease_report_malaria_en.pdf) (Global Fund, *Disease Report*).

<sup>2</sup> Global Fund, *Disease Report*, p. 44.

<sup>3</sup> World Health Organization, Fact Sheet No. 94: Malaria (May 2007) (WHO, *Malaria Fact Sheet*).

<sup>4</sup> WHO, *Malaria Fact Sheet*.

<sup>5</sup> Population and Human Resources Operations Division, South Asia Region, *Project Appraisal Document on a Proposed Credit in the Amount of SDR 119.2 Million to India for a Malaria Control Project*, p. 15 (May 15, 1997) (MCP PAD).

<sup>6</sup> *Ibid.*

<sup>7</sup> *Ibid.*

To reduce the deaths and losses that malaria was inflicting on India, in 1997 the World Bank (the Bank) approved the Malaria Control Project (MCP).<sup>8</sup> The project would introduce a better-targeted mix of malaria control methods—such as localized spraying, insecticide-treated bed nets, and early detection and treatment systems—to India’s existing National Malaria Eradication Program (NMP), and it would provide capacity-building support to the NMP as it decentralized to the district level and strengthened state-level supervision.<sup>9</sup>

The MCP targeted six of the 10 most affected states (Andhra Pradesh, Gujarat, Madhya Pradesh, Maharashtra, Orissa, and Rajasthan) and two others (Chhattisgarh and Jharkhand).<sup>10</sup> It was planned to cost USD 203.9 million, of which 85 percent (USD 173.3 million) would be covered by the International Development Association (IDA) Credit and 15 percent (USD 30.6 million) by the Borrower.<sup>11</sup>

## Summary of Findings

The DIR’s review of the MCP found:

1. widespread indicators of fraudulent and corrupt practices in the award of MCP contracts for insecticides (pyrethroids), bed nets, and pharmaceuticals, such as similar bid prices, use of fraudulent documents, and payments to government officials;
2. indicators of fraudulent and corrupt practices—such as rotation of contract winners, bidders with identical phone numbers, and similarities in the text and layout of bids—affecting the award of 73 percent (by volume) and 50 percent (by value) of DIR-reviewed contracts procured through decentralized procurement; and
3. that the Bank’s project reports and assessments did not fully identify, convey, or address the widespread indicators of collusion and fraud affecting the project.

The DIR found indicators of widespread corrupt practices in the award of MCP centrally procured contracts, most notably indicators of bid rigging and collusion. The indicators were pervasive throughout the project’s major areas of procurement—

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<sup>8</sup> *Ibid.*, p. 2.

<sup>9</sup> World Bank, *Implementation Completion Report on a Credit in the Amount of SDR 119.2 Million to India for a Malaria Control Project*, p. 2 (Jun. 27, 2006) (MCP ICR).

<sup>10</sup> *Ibid.*, p. 34.

<sup>11</sup> *Ibid.*, Annex 2, Table 2a, Planned Data.

pyrethroids, bed nets, and pharmaceuticals—and persisted for most of the years of the project. Nestor Pharmaceuticals Limited (Nestor) and Pure Pharma Limited (Pure Pharma), two firms recently debarred by the Bank for collusive practices under the Reproductive and Child Health Project (RCH), were found to exhibit indicators of collusive behavior under the MCP. The DIR also found indicators of bid rigging, payment of bribes, and other forms of fraud and corruption in the bidding process and award of contracts, including contracts procured centrally by the project's Procurement Support Agency (PSA) and locally by the project's various district malaria offices. The indicators tend to show that fair and open competition for contracts was adversely harmed and prices, at times, appeared to be inflated.

In the procurement of pyrethroids, the largest component of the MCP in terms of dollar value, the DIR found numerous indicators that four firms colluded to divide more than 90 percent of the value of the contracts among themselves. The indicators were consistent with those previously recognized by the Bank's Sanctions Board to be indicators of collusive behavior, such as the submission of identical bid prices. There are indicators that suggest that the collusive behavior subverted open competition, resulted in inflated prices, and likely involved individuals within the project's PSA. Noteworthy is the sudden disappearance of these indicators for the final two pyrethroid tenders, the reasons for which are not entirely clear. The DIR also found indicators that the Government of India's Central Insecticide Board (CIB) may have engaged in corrupt practices in the granting of licenses to sell pyrethroids in India.

Similarly, for the procurement of bed nets, the DIR found that five of the seven suppliers either exhibited indicators of collusive or corrupt behavior or otherwise performed in a manner that adversely affected project implementation. The DIR found indicators that a group of four firms bidding for bed net contracts were interrelated through familial connections and may have colluded (with the help of two other firms) to receive contracts. It also found numerous indicators of poor product quality in the bed nets supplied by the firms.

In the procurement of pharmaceuticals, the DIR found indicators suggesting that Nestor and Pure Pharma—as found in the RCH investigation—may have colluded in order to win the majority of contracts for chloroquine and combi-blister packs.

The DIR's review of contracts procured by two district malaria offices found widespread indicators of fraud and corruption affecting the procurement of 73 percent of the volume (50 percent of total value) of those two districts' 50 largest

contracts. The high indicator rate warrants attention because of the large amount of project funds utilized in this manner (approximately 40 percent of the MCP's total project funds) and the low level of supervision by both the Borrower and the Bank.

Finally, the DIR's review of the project's reports and assessments found that the Bank and the Borrower did not fully identify, convey, or address the widespread indicators of collusion and fraud affecting the project. Whenever indicators of possible fraud or collusion were identified, it is unclear what, if anything, was done by the Bank or Borrower to remedy the situation. More significantly, the Bank's project supervision systems largely did not detect the probable collusive rings. While the Bank's final project evaluation was forthright in belatedly noting project implementation issues, the Bank's reliance on epidemiological statistics to evaluate project outcomes meant that the MCP's overall success rating did not reflect fully the project's implementation difficulties, which may have been at least partially caused by fraud and corruption.

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## Project Background

### Project Design

#### A. Components

The MCP was engaged in malaria prevention, treatment, research, and institutional capacity-building. The largest portion of project funds (47 percent) was committed to the preventive selective vector control component, which consisted of selective insecticide spraying in targeted locations and the introduction of environmentally friendly larvivorous fish.<sup>12</sup> To implement this component, the MCP funded insecticides (synthetic pyrethroids), vehicles, and equipment, as well as training, consultant services, and research.<sup>13</sup> The MCP also included another, smaller preventive component (six percent of project funds) which consisted of the distribution of insecticide-impregnated mosquito bed nets.<sup>14</sup>

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<sup>12</sup> *Ibid.*, p. 33. Percentage calculation based on Actual IDA amounts reported.

<sup>13</sup> *Ibid.*, p. 3.

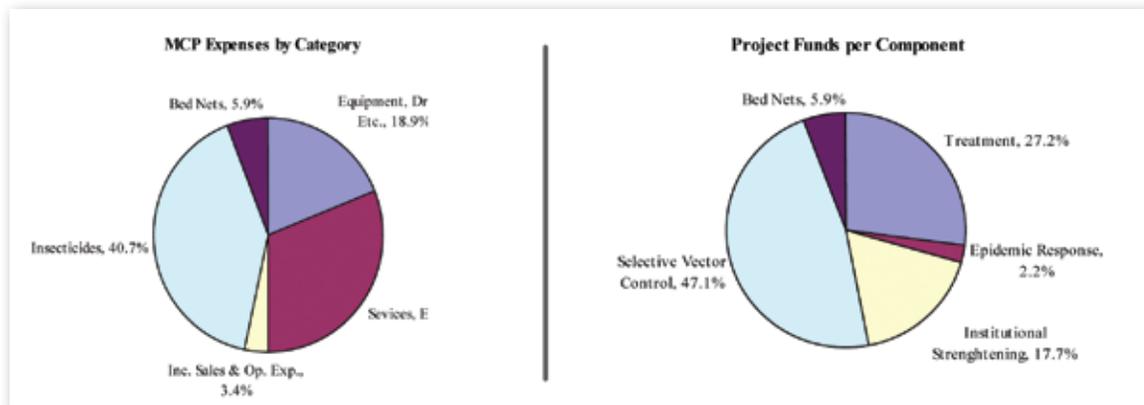
<sup>14</sup> *Ibid.*, p. 33. Percentage calculation based on Actual IDA amounts reported.

The second largest amount of funds (27 percent) was committed to the early detection and prompt treatment component, which aimed to improve the diagnosis and treatment of malaria and other vectorborne diseases.<sup>15</sup> To implement this component, the MCP financed rapid diagnostics kits; drugs such as chloroquine, combi-blister packs, arteether injections, and diethyl carbamazine citrate (DEC) tablets; laboratory supplies and equipment; and training and salaries.<sup>16</sup>

Most of the goods and drugs purchased for the MCP were widely available commodities on national and international markets. This allowed the MCP to utilize international competitive bidding (ICB) or national competitive bidding (NCB) processes for three-fourths of the project's funds. These procurements were administered on behalf of the Government of India by RITES, a government-owned PSA.<sup>17</sup>

The MCP also included components to finance epidemic response (2 percent of total expenditures)<sup>18</sup> and institutional strengthening (18 percent of total expenditures).<sup>19</sup> Figures 1 and 2 demonstrate the division of expenditures:

**Figures 1 and 2. Proportion of Project Funds Spent per MCP Component and MCP Expenses by Category**



Source: Implementation Completion Report (ICR)

## B. Implementation Structure

The procurement of bulk commodities—pyrethroids, bed nets, drugs, and equipment—was done centrally, through ICB and NCB procurements by RITES, a

<sup>15</sup> *Ibid.*

<sup>16</sup> *Ibid.*, p. 3.

<sup>17</sup> *Ibid.*, p. 18.

<sup>18</sup> *Ibid.*, p. 33. Percentage calculation based on Actual IDA amounts reported.

<sup>19</sup> *Ibid.*

PSA selected by the Government of India. For all project districts there was a registered entity “the District Malaria Control Society” chaired by the District Magistrate which was responsible for the overall project implementation. The district chief medical officer and malaria officer were members of this society.<sup>20</sup> The District Malaria Offices (DMOs) were responsible for commodity distribution, training and education, and hiring of services.<sup>21</sup> Because the DMOs did not exist at the time of project appraisal, the Bank assisted the NMP in identifying, establishing, and training the DMOs for the purposes of implementing the MCP. The NMP was responsible for DMO oversight.<sup>22</sup>

### C. Project Controls

At the time of project approval, the Bank identified several high risks to project success, including: (1) excessive indoor spraying; (2) epidemic outbreaks; (3) the non-use of mosquito nets; and (4) delayed project startup at the district level.<sup>23</sup> Medium-rated risks included limited community involvement and procurement delays.<sup>24</sup> Fraud and corruption were not identified as risks in the Project Appraisal Document (PAD).

To ensure proper implementation, the MCP’s design contained a system of controls, including monitoring and evaluation commitments on the part of the NMP, a series of reviews and audits, and Bank supervision. The MCP PAD and credit agreement described the following control system:

- The NMP’s monitoring and evaluation were to consist of:
- “Routine data” collected monthly from the districts
- Quarterly reports from districts on key performance indicators, with one staff member at NMP accountable for each of the set of indicators
- Qualitative feedback from local malaria societies and informal consultations from the Panchaya Raj Institutions (village counsels).<sup>25</sup>

Reviews and audits of the project were to consist of:

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<sup>20</sup> In 2002–2003, similar societies were created at the state level and chaired by the Secretary, Health for all project states, which had the responsibility to implement the project in the state with oversight responsibility over the districts.

<sup>21</sup> MCP ICR, pp. 18 and 34.

<sup>22</sup> MCP PAD, p. 5.

<sup>23</sup> *Ibid.*, p. 22.

<sup>24</sup> *Ibid.*

<sup>25</sup> *Ibid.*, pp. 5–6.

- An independent external agency review of NMP management administrative functions in the second or third year of implementation<sup>26</sup>
- An independent review of the technical, administrative, and operational aspects of the program by December 15, 2000<sup>27</sup>
- Annual Program Development Reviews conducted by a committee of implementing agency and foreign experts<sup>28</sup>
- Special Account and Statement of Expenditure audits, along with Bank access to the accounting records and supporting documents<sup>29</sup>
- Annual reports discussing the results of monitoring and evaluation and recommending measures to ensure achievement of project objectives<sup>30</sup>
- Prior- and post-reviews of procurement according to pre-determined thresholds.<sup>31</sup>

The Bank would supervise the program by:

- Reviewing the project's adherence to the National Policy Letter and Revised Insecticide Guidelines
- Evaluating the revised operational guidelines that were to be published in the second year of the Credit, the revised operational procedures drawn upon the Project Implementation Plan, guidelines for district implementation plans, and key inputs such as social and environmental assessments
- Conducting a desk review of the project activities in two to five percent of all districts
- Making spot visits to certain districts implementing the program.<sup>32</sup>

Based on documents obtained by the DIR from the Government of India and the Region, it is unclear whether all these supervision methods were, in fact, used. The DIR did not receive copies of any documentation demonstrating audits, reviews, or analyses conducted other than the Bank's standard supervision methods, *i.e.*, periodic supervision missions; *aides-mémoires* and other reports generated from

<sup>26</sup> *Ibid.*

<sup>27</sup> Development Credit Agreement (Malaria Control Project) between India and International Development Association, Sched. 4, para. 2 (Jul. 30, 1997) (MCP Credit Agreement).

<sup>28</sup> *Ibid.*, Sched. 4, para. 8.

<sup>29</sup> *Ibid.*, Art. IV, sec. 4.0.

<sup>30</sup> *Ibid.*, Sched. 4, para. 19.

<sup>31</sup> *Ibid.*, Sched. 3.

<sup>32</sup> MCP PAD, p. 6.

such missions; periodic Government of India project audits; or the end-of-project ICR.

## D. Costs and Time

The MCP was extended four times to facilitate completion and finally closed on December 31, 2005, 33 months after the original planned closing date of March 31, 2003.<sup>33</sup> The MCP was originally planned to cost USD 203.9 million, of which 85 percent (USD 173.3 million) would be covered by the Bank and 15 percent (USD 30.6 million) by the Borrower.<sup>34</sup> However, the project cost only USD 129.3 million due to the suspension of funds as described below, with the Bank providing only USD 113.8 million (88 percent of total actual expenditures), while the Borrower provided USD 15.5 million (12 percent).<sup>35</sup> An additional USD 14.7 million of project funds were reallocated to the Polio Eradication Project in October 2005.<sup>36</sup>

# Project Implementation

## A. Initial Implementation Problems

The Board approved the MCP on June 12, 1997, and it became effective on September 30 of that year.<sup>37</sup> In early 1998, however, the Bank's *aides-mémoire* began to note serious procurement bottlenecks and capacity issues.<sup>38</sup> It quickly became apparent that the initial, sole-sourced procurement entity, the central purchase organization of the Government of India—the Directorate-General of Supplies and Disposal—had inadequate capacity to conduct procurement.<sup>39</sup> Two years into the project, the Ministry of Health and Family Welfare replaced the Directorate-General of Supplies and Disposal with RITES, which it identified through a competitive process.<sup>40</sup>

By mid term, four years into the project, only 25 percent of the credit had been disbursed and the Bank rated the project unsatisfactory on all fronts.<sup>41</sup> The Mid Term Review reported inadequate implementation of bed nets, spraying, training,

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<sup>33</sup> MCP ICR, p. 4.

<sup>34</sup> *Ibid.*, Annex 2, Table 2a, Planned Data.

<sup>35</sup> *Ibid.*, p. 33.

<sup>36</sup> *Ibid.*, p. 17.

<sup>37</sup> *Ibid.*, p. 1.

<sup>38</sup> *Ibid.*, p. 22.

<sup>39</sup> *Ibid.*, p. 18.

<sup>40</sup> *Ibid.*

<sup>41</sup> E. Lim, Country Director, letter to J. Chowdhury, Secretary, Health, re: Mid Term Review of Malaria Control Project, p. 1 (Dec. 17, 2001) (Mid Term Review Cover Letter).

and information, education, and communication (IEC) activities.<sup>42</sup> It concluded that, “in essence all states are still working with the same mix of strategies as when the project started.”<sup>43</sup>

## B. Suspension

As a result of its initial implementation problems, on June 28, 2002—five years into the project—the Bank suspended the project and cancelled 28 percent (USD 46.5 million) of the credit.<sup>44</sup> The Bank cited delays in disbursements and program implementation, as well as the failure to comply with multiple Credit Agreement covenants.<sup>45</sup> The Bank conditioned lifting the suspension on the Borrower conducting the independent review of the technical and administrative aspects of the program that had been due by December 15, 2000.<sup>46</sup> However, the Bank did not appear to be aware of the role that fraud and corruption may have played in the implementation problems, thus exposing the project to future threats from suppliers exhibiting indicators of fraudulent behavior.

## C. Implementation Performance

On December 13, 2002, after a six-month pause, the Bank lifted the suspension and work resumed on the project.<sup>47</sup> The Bank’s January 2003 project status report identified renewed leadership and political commitment as keys to putting the project on a road to recovery: “[N]ew leadership at the Health Ministry [was] evincing keen interest in [the MCP] and made some sweeping changes to facilitate better coordination and implementation. The Health Secretary has replaced the Joint Secretary ... with a more efficient and senior level Joint Secretary. Senior Health Ministry officials are visiting all project states and are communicating with the state health officials to accelerate project implementation.”<sup>48</sup>

From 2004 onward, the Bank continually rated the MCP’s implementation progress and development objectives as “satisfactory.”<sup>49</sup> The Bank’s supervision

<sup>42</sup> Mid Term Review Cover Letter, p. 1.

<sup>43</sup> Mid Term Review Mission *Aide-Mémoire*, p. 19 (Dec. 17, 2001).

<sup>44</sup> MCP ICR, p. 22.

<sup>45</sup> M. Nishimizu, Vice President, South Asia Region, letter to R. Bhatnagar, Director, Department of Economic Affairs, pp. 1–2 (Jun. 28, 2002) (Nishimizu Letter).

<sup>46</sup> *Ibid.*, p. 2.

<sup>47</sup> M. Nishimizu, Vice President, South Asia Region, facsimile to A. Kishore, Additional Secretary, Department of Economic Affairs, *et al.* (Dec. 16, 2002).

<sup>48</sup> Project Status Section of the Jan. 7, 2003, Project Status Report.

<sup>49</sup> *Malaria Control Project (Cr. 2964-IN) International Development Association Review Mission, Dec. 8–19, 2003*, p. 1 (Jan. 8, 2004) (Dec. 2003 *Aide-Mémoire*); *Malaria Control Project (Cr. 2964-IN) International Development Association Review Mission, May 19–31, 2004*, p. 1 (Jul. 26, 2004) (May 2004 *Aide-Mémoire*); *International Development Association Review Mission, October 4–18, 2004*, p. 1 (Nov. 19, 2004); *Enhanced Malaria Control*

mission *aides-mémoire* identified only Jharkhand and Orissa as needing strengthening, for which they recommended preparation of monitoring and supervision plans, technical and management assistance, and Ministry visits.<sup>50</sup> Procurement was identified as the MCP's one problem flag, and disbursement delays were cited as a cause of concern.<sup>51</sup> Again, fraud and corruption were not identified as threats to project implementation.

However, in 2005, as the Bank prepared for its ICR, it began to identify additional implementation problems. Supervision and management capacity were cited as weak across all states: "Even in higher-performing states, such as Gujarat, the ability and capacity of districts to supervise and manage malaria control is limited."<sup>52</sup> The ICR review mission conducted detailed field visits to Gujarat and Orissa that identified issues unnoticed by previous reviews. For example, (1) staffing vacancies were repeatedly identified as a significant problem;<sup>53</sup> (2) the poor quality of IRS was discussed in detail and identified as a greater concern; (3) the districts' ability and capacity to supervise and manage malaria control were viewed as limited; and (4) the data gathered from monitoring the MCP's processes were insufficient for assessment of the quality of project outcomes.<sup>54</sup> Despite these findings, the Bank maintained the project's satisfactory ratings.

#### D. Suspicions of Collusive Behavior

About five years into the project, both the Bank and RITES had concerns regarding the possible operation of a cartel in the pyrethroid tenders. In early 2002, RITES noted apparent collusion in prices submitted by four companies—two of whom submitted identical bids—and requested explanations from them. All of the companies denied the allegation and RITES, apparently satisfied by the explanations given, split the schedule, awarded two separate contracts, and took no further action to prevent the firms from bidding.<sup>55</sup>

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*Project (Cr. 2964-IN) Review and Implementation Completion Mission, February 28–March 9, 2005*, p. 2 (Undated). As the MCP ICR also noted, the Bank's files lack *aides-mémoire* and project status reports for 2003.

<sup>50</sup> Dec. 2003 *Aide-Mémoire*, p. 7 (Orissa and Jharkhand need strengthening); May 2004 *Aide-Mémoire*, p. 4 (same, with proposals for action).

<sup>51</sup> Dec. 2003 *Aide-Mémoire*, p. 1 (problem flag); May 2004 *Aide-Mémoire*, pp. 4–5 (procurement as issue).

<sup>52</sup> Enhanced Malaria Control Project (Cr. 2964-IN) Implementation Completion Review Mission, Dec 5–15, 2005, para. 5 (ICR Review Mission *Aide-Mémoire*).

<sup>53</sup> *Ibid.*, pp. 2–3; *Enhanced Malaria Control Project – Implementation Completion Reporting Mission Field Visit Notes from Orissa* (Dec. 8–11, 2005), p. 2 (Undated) (*Orissa Field Visit Notes*).

<sup>54</sup> ICR Review Mission *Aide-Mémoire*, pp. 2 to 5 and 8.

<sup>55</sup> This is discussed in detail in the pyrethroids complaint section, *infra*.

## E. Project Evaluation

The ICR rated the MCP's implementation and achievement of development objectives as "satisfactory," though its authors expressed their preference for a lower "moderately satisfactory" rating because the project's three-year lag and 63 percent expenditure rate were inefficient.<sup>56</sup> The ICR concluded that the project achieved its purpose because of "the positive epidemiological trends and the strategic reorientation of the national program for eradication and control."<sup>57</sup>

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# The DIR's Approach to the MCP

The MCP was included in the DIR primarily because suppliers identified as exhibiting collusive behaviors by Department of Institutional Integrity's (INT) investigation into the Bank's RCH Project were involved in this project. In keeping with its risk-driven methodology, the DIR selected areas of the MCP to review based on an analysis of the fiduciary and development risks of the project's primary components. By focusing on high-risk areas, the DIR maximized its ability to identify indicators of corrupt schemes that could affect significantly the MCP's outcomes. The DIR also attempted to follow goods from procurement through delivery to identify causalities between the two. The DIR's risk analysis and areas of focus are listed in Table 1.

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<sup>56</sup> MCP ICR, pp. 5–6. The components of the project were all rated satisfactory, except for epidemic response and intersectoral collaboration, which were rated as moderately satisfactory. *Ibid.* at p. 13.

<sup>57</sup> *Ibid.*, pp. 5–6.

**Table 1. The DIR Selected Four Areas of Review for the MCP**

Area of Review	Fiduciary Risk	Development Risk
Pyrethroids	<p>Pyrethroids comprised the single largest expenditure under the MCP (36 percent).</p> <p>Pyrethroids comprised the majority (55 percent) of the value procured by RITES, the procurement agent responsible for allocating the majority (59 percent) of funds under the MCP.</p> <p>Out of 63 complaints regarding the MCP, 24 were related to pyrethroids.</p>	<p>Pyrethroids were necessary for the successful implementation of the two preventive project components: selective vector control and medicated mosquito nets.</p>
Bed Nets	<p>Bottlenecks in bed net procurement partially contributed to project suspension in 2001.</p> <p>RCH witnesses referenced corruption in MCP bed net procurement.</p> <p>Out of 63 complaints regarding the MCP, one-third (21) were related to bed nets.</p> <p>Bed nets were the second largest (19 percent) good procured by RITES under the MCP.</p>	<p>Bed nets were necessary for the successful implementation of the medicated mosquito net component, the introduction of which was essential to reduce excessive reliance on insecticide spraying.</p>
Pharmaceuticals: Chloroquine; Chloroquine/Primaquine Combi-Blister Packs; DEC Tablets; Arteether Injections	<p>Two companies identified as colluding in RCH procurements also bid for and won pharmaceutical contracts under the MCP.</p> <p>Pharmaceuticals were procured primarily by RITES, the procurement agent responsible for allocating the majority of MCP funds.</p>	<p>Pharmaceuticals were necessary for the successful implementation of the MCP's second-largest component, early detection and prompt treatment.</p>
Local Contracts <sup>a</sup>	<p>According to the DIR's calculations, DMOs spent 40 percent of MCP funds through local shopping, direct contracting, and other less-stringent procurement methods. Decentralized procurement using less competitive methods is increasingly common in Bank projects.</p>	<p>Because a large proportion of project funds were spent on local contracts, their successful procurement was key to project success.</p>

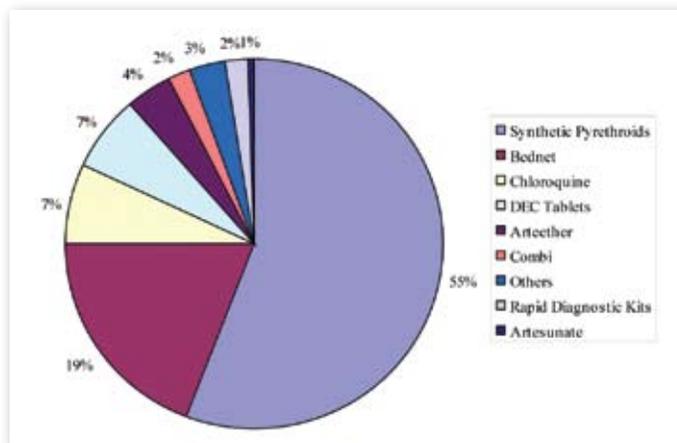
<sup>a</sup>. For the purpose of this report, "Local Contracts" refers to direct contracting, shopping, NCBs, and single source procured at the decentralized level, *e.g.*, state and district levels.

## Contract Procurement

### A. Centrally Procured ICB and NCB Contracts by RITES

The DIR conducted a procurement review of all RITES-administered tenders. These tenders involved 59 percent of the MCP's expenditures and included all procurements of pyrethroids, bed nets, and pharmaceuticals.<sup>58</sup> The DIR reviewed 92 of the 94 ICB and NCB contracts identified by RITES covering all types of malaria commodities as shown in Figure 3 below.<sup>59</sup> The DIR's analysis integrated information extracted from the DIR's contract database with information from bid documents, bid evaluation reports (BERs), correspondence between the Bank and RITES, and contracts.<sup>60</sup> To detect patterns indicating possible fraud or corruption, the DIR analyzed the information both within each tender and across tenders.

**Figure 3. Items Procured by RITES through ICB and NCB under the MCP (sorted by total value of contracts)**



Source: RITES procurement data.

<sup>58</sup> Percentage calculation based upon a comparison of the DIR database, populated from RITES' ICB and NCB procurement files with the ICR's ICB and NCB procurement totals. According to RITES data, the total of ICB/NCB contracts they procured represented USD 61.3 million. According to the ICR, the total disbursed under MCP was 63 percent of the original approved amount (USD 164.8 million) equal to USD 103.8 million. USD value is calculated using actual daily exchange rate on the date the contract was signed.

<sup>59</sup> At the time of INT's document review, RITES was missing files for contracts RITES/MCP/MSM/03/2004/272 and RITES/MCP/MSM/03/2004/273.

<sup>60</sup> Grant Thornton staff reviewed the contract documents provided by RITES and populated the DIR database with RITES' ICB and NCB procurement information. The DIR requested that RITES produce copies of all of its MCP-related procurement documents.

## B. Locally Procured Contracts by States and Districts

The risk of fraud and corruption is significant when contracts: (1) are procured by decentralized entities with weak capacity; (2) use less stringent methods of local shopping and direct contracting; and (3) lack supervision such as prior-review. And although the value of individual local contracts is small, the large volume of such contracts means that persistent fraud and corruption affecting local contracting can have large financial effects when multiplied across all such contracts.

The DIR reviewed a selection of contracts procured by the states and districts for indicators of fraud and corruption such as improper sole sourcing, bid rigging, preferential treatment, bid rotation, or bidders with identical addresses or telephone numbers. This review did not include any end-use audit or physical inspection of these contracts.

## Review of Contract Implementation

The DIR conducted field visits to review the implementation of MCP contracts. In considering which sites to visit, the DIR focused on districts having received the more recent shipments of goods (since shipments delivered earlier would have already been depleted or past their shelf life) and having received the widest range of goods from the largest number of contracts exhibiting indicators of fraud and corruption from the DIR's review of procurement. Accordingly, the DIR ultimately chose to visit the following 15 locations within the following three states:<sup>61</sup>

### *Maharashtra*

- State malaria (SM) officer in Pune headquarters
- A medical storage warehouse in Mumbai
- The DMOs in Thane and Nagpur
- A Primary Health Center (PHC) in Raipur, Maharashtra.

### *Chhattisgarh*

- The state malaria office (SMO) in Raipur
- The DMOs in Durg, Rajnandgaon, Kanker, and Bastar
- A Community Health Center (CHC) near Jagdalpur.

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<sup>61</sup> The DIR limited its site visits to five states within India. Of these five states, the MCP was implemented in only three of them: Maharashtra, Chhattisgarh, and Orissa.

## Orissa

- The SMO in Bhubaneswar
- The DMOs in Dhenkanal, Cuttack, and Mayurbhanj.

At each site visited, the DIR focused on reviewing the receipt and distribution of goods along their supply chain. It reviewed documentation, visited warehouses and medical facilities, and spoke with DMO personnel to determine whether the implementation of the goods exhibited indicators of fraud and corruption in the form of shortened quantities or inventory leakage. For its selection of sites, the DIR traced the distribution of the procured goods along their supply chain from the supplier (who won the contract award), to the state headquarters, to the division (if applicable), to the district, and—in two instances—to the PHC or CHC.

To test for possible shipments of under-quality goods, the DIR aimed to collect a sample of goods supplied under the MCP and have the sample tested by an independent laboratory. However, due to the long period between the time most MCP goods had been contracted and delivered (1999 to 2005) and the date of the DIR's review (2007), most of the insecticides, bed nets, and pharmaceuticals had already been used, administered, or consumed.<sup>62</sup>

Other matters that complicated and limited the DIR's review of goods quality were: (1) the DIR would be unable to collect large samples of items, which was preferred in order to optimize the effects of the test, given the very limited supply of drugs available on hand at each location (*i.e.*, a large sample would deplete totally or in unreasonable proportions the stocks of drugs at some sites); (2) the chemical and hazardous nature of pyrethroids and how they are stored (in large drums) negated the ability to collect the items and test them remotely; and (3) onsite testing for purposes of the DIR was not practical.

Consequently, the DIR collected and had tested a very small sample of pharmaceuticals (DEC tablets and chloroquine). While the tests returned no indicators of poor quality, as described further in this Chapter, the DIR cautions that the test sample on its own was insufficient to render any meaningful conclusions about the quality of goods supplied on the MCP. In fact some reports from the field and correspondence indicated that there had been quality issues at one time for DEC tablets, but the DIR's testing was not representative enough to either corroborate

<sup>62</sup> Another consideration caused by the time lag between the time the goods were delivered and the DIR was that the goods from earlier contracts, if still available for testing, would be beyond their expiration date and thus unsuitable for testing. However, and as was expected, the DIR did not find any instances of expired drugs at the locations it visited.

independently such facts or provide a conclusive finding on the overall quality of the drugs.

## Complaints

The DIR also obtained 63 complaints filed during the MCP.<sup>63</sup> The DIR analyzed these complaints to determine: (1) whether and how they overlapped with the DIR's findings; and (2) whether and how the Bank addressed them.

## Project Reports and Assessments

Finally, the DIR obtained and reviewed the MCP design, supervision, and evaluations documents. These included the MCP PAD, the MCP project implementation plan, *aides-mémoire*, project status reports and implementation status reports, the MCP ICR, available procurement post-review reports, available project audit reports, and available Statement of Expenditure Financial Review Reports. The DIR analyzed these materials to understand how the Bank assessed fraud and corruption risks in the project's design, and to determine whether the indicators of fraud and corruption identified by the DIR were captured by the Bank's supervision systems.

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# Findings

## Pyrethroids

Synthetic pyrethroids—insecticides used in IRS and impregnating bed nets—were an important component to the success of the MCP because these insecticides were used in almost all of the project's malaria prevention activities.<sup>64</sup> The procurement of pyrethroids represented nearly one-third of RITES' ICB contracts by volume, and 55 percent of RITES' ICB and NCB contracts by value (approximately

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<sup>63</sup> The complaints were retrieved from the INT Information System; the RCH investigation; IRIS; the MCP Project Portal; and the correspondence files provided by the India Procurement Hub. Based on the review of the Procurement Hub complaints, it appeared that other complaints may be filed in IRIS but the DIR did not identify and locate these complaints during its searches.

<sup>64</sup> Pyrethroids were procured in both liquid and water-disposable powder forms. As discussed herein, the term "pyrethroids" encompasses both forms, unless otherwise specified.

USD 33.6 million).<sup>65</sup> A total of 29 pyrethroid supply or production contracts were awarded by way of eight tenders between 1999 and 2005. Tables 2 and 3 summarize the award of pyrethroid contracts by tender and by supplier.

**Table 2. Summary of Pyrethroid Tenders**

Year	Tender Ref	Type of Pyrethroids	Number of Schedules	Number of Contracts	Total Amount of Contracts Signed (USD million)
1999	RITES/MSM/MCP/02/1999	Powder	4	4	10.03
2000	RITES/MSM/MCP/08/2000	Powder	4	4	8.68
2000	RITES/MSM/MCP/15/2000	Liquid	2	2	0.09
2001	RITES/MSM/MCP/04/2001	Powder	4	3	5.02
2002	RITES/MSM/MCP/04/2002	Powder	8	7	6.83
2002	RITES/MSM/MCP/05/2002	Liquid	1	1	0.14
2004	RITES/MSM/MCP/03/2004	Powder	8	6	2.37
2004	RITES/MSM/MCP/04/2004	Liquid	2	2	0.41
	<b>Total</b>		<b>33</b>	<b>29</b>	<b>33.57</b>

Note: Pyrethroid tenders were split into several schedules. Bidders had the option of bidding either on a single or on multiple schedules. Contracts awarded generally were for each schedule, but on occasion, represented the combination of more than one schedule. USD amount is calculated using actual daily exchange rate on the date the contract was signed.

<sup>65</sup> RITES represented to the DIR that it tendered 29 pyrethroids contracts out of 94 total ICB and NCB contracts, for a total of USD 33.6 million (USD value is calculated using actual daily exchange rate on the date the contract was signed.). The MCP ICR states that the MCP spent USD 46.3 million on insecticides (which includes the purchase of a small amount of insecticides other than pyrethroids)—36 percent of all project disbursements. MCP ICR, p. 34.

**Table 3. Award of Pyrethroid Contracts by Supplier (in descending order of number of contracts awarded)**

Winning Supplier	Number of Contracts Awarded	Sum Value of Contracts Awarded (USD million)	Percent of Total Value
BASF India	6	8.70	26
Bayer India	6	6.81	20
Aventis CropScience India	5	7.25	23
Zeneca Agrochemicals	4	7.89	23
B.R. Agrotech	3	1.09	3
Gharda Chemical	3	0.79	2
Meghmani Organics	2	1.04	3
<b>Total</b>	<b>29</b>	<b>33.57</b>	<b>100</b>

Note: BASF India's contract data include contracts won by Cyanamid Agro Ltd. and Acco Industries, Ltd. because they were acquired by BASF during the time of project implementation. For the same reason, Zeneca Agrochemicals' contract data include contracts won by Syngenta Crop Protection. USD amount is calculated using actual daily exchange rate on the date the contract was signed.

Source: RITES procurement data.

The DIR found multiple indicators that four of the seven suppliers of pyrethroids colluded in order to circumvent the competitive bidding process and win virtually all contracts awarded until the final two tenders in 2004, whereupon the indicators stopped, suggesting that the four companies discontinued their collusive activities at that point. Indicators of collusion included:

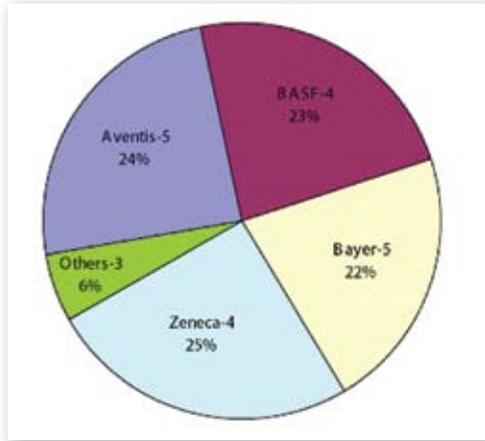
- The quotation of identical or unusually similar bid prices
- The rotation of contract awards within tenders
- The splitting of contract awards between bidders
- Inflated prices
- Limited competition
- Unusual patterns in complaints filed.

#### **A. Indicators of Collusive Behavior Were Identified in the Procurement Process**

The DIR found that four companies—Aventis CropScience India Ltd. (Aventis), Bayer India Ltd. (Bayer), BASF India Ltd. (BASF), and Zeneca AgroChemicals Ltd (Zeneca, which was later awarded contracts as Syngenta)—won 94 percent in value (or 18 of the first 21) of the pyrethroid contracts awarded before 2004 and

91 percent of the total contract value for all tenders. As Figure 4 shows, each of the firms won a similar proportion of the total number of contracts awarded.

**Figure 4. Distribution of Pyrethroid Contracts Awarded before 2004<sup>66</sup>**



Note: The number next to each firm's name is the number of contracts won by the firm during this time period; the percentage is that firm's share in volume of all pyrethroid contracts won during this time period. The time period represents the calendar dates the contracts were awarded (versus bid on).

Source: RITES procurement data.

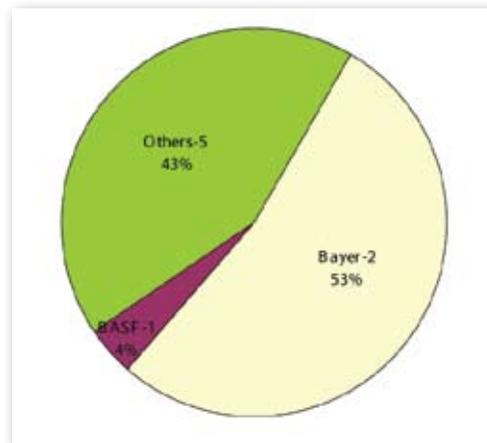
The other firms winning a combined total of six percent of the contracts were B.R. Agrotech, Gharda Chemical, and Meghmani Organics.<sup>67</sup>

By comparison, after 2004 pyrethroid contracts were distributed in a significantly less symmetrical manner to a larger number of winners (Figure 5).<sup>68</sup>

<sup>66</sup> These charts are based on data extracted from the DIR database of RITES procurement data. The percentage represents the portion of all pyrethroids contracts won by the company during the stated time period, and the number is the number of contracts won by the company.

<sup>67</sup> The MCP pyrethroid bid requirements included a qualification requirement requiring bidders to demonstrate that, in the past, they had supplied 80 percent of the quantity required by the contract for which they were bidding. See, e.g., BER of IFB No. RITES/MSM/MCP/03/2004, sec. 8.1. This requirement, combined with the large contractual quantities, effectively excluded many small domestic suppliers from winning contracts. As a result, despite frequently being the lowest-evaluated bidders, between 2000 and 2003 the Indian firms B.R. Agrotech, Gharda, and Meghmani won only one contract each (all under tender 04/2002) because they could not meet this specification. The specification may have been intended to identify suppliers who could guarantee delivery of a large volume of pyrethroids, but it caused only a few major international firms to win MCP pyrethroid contracts.

<sup>68</sup> At that time, Bayer had in fact merged with Aventis as reported in the press release from Bayer AG dated Mar. 8, 2004.

**Figure 5. Distribution of Pyrethroid Contracts after 2004**

Note: The number next to each firm's name is the number of contracts won by the firm during this time period; the percentage is that firm's share of all pyrethroid contracts won during this time period.

Source: RITES procurement data.

The other firms winning contracts were B.R. Agrotech (two contracts), Gharda Chemical (two contracts), and Meghmani (one contract).

As described below, the DIR found multiple indicators that the four companies winning the majority of the contracts prior to 2004 were operating as an apparent cartel. The four members were: Aventis, Bayer, BASF, and Zeneca (later awarded contracts as Syngenta). The operation of the apparent cartel appeared to have adversely affected the competitive process for the tender and award of at least 18 of the 21 contracts awarded during that period, resulting in less open and fair competition for those contracts and inflated prices.

#### 1. *Quotation of Identical or Unusually Similar Bid Prices*

The DIR found that the members of the apparent cartel frequently submitted either identically priced bids (*i.e.*, *exactly* the same price), or bid prices clustered within less than 0.5 percent of each other. Due to the nature of the pyrethroid product and how it is priced, this type of pattern is highly unusual.<sup>69</sup> In furtherance of this argument, the Bank's Sanctions Board has found identical pricing to

<sup>69</sup> Interview of Geoff Foxon, Marketing Director, and Bryan Shand, Managing Director, Agropharm UK (May 4, 2007). In addition, the price disparity among bids for the tenders in 2004—tenders which exhibited none of the indicators of collusive behavior as described elsewhere in the MCP Chapter, and thus are viewed by the DIR as a competitively priced tender—was wide, even among the members of the previously operating apparent cartel. See BER for IFB No. RITES/MSM/MCP/03/2004 sec. 4.3 for Schedule VII, for example.

be “particularly compelling” evidence of collusive behavior resulting in debarment proceedings against such perpetrators.<sup>70</sup>

*Identical Bid Prices Submitted.* Various members of the apparent cartel submitted identically priced bids on three separate tenders:

- *RITES/MSM/MCP/15/2000.* Bayer and Aventis quoted the same unit and total price for this tender, which was only for one schedule.<sup>71</sup> This unusual bidding result prompted RITES to split the schedule between the two firms, awarding each a contract for half of the original schedule amount.<sup>72</sup>
- *RITES/MSM/MCP/04/2001.* In this tender, the members of the apparent cartel submitted bids with identical prices on two of the tender’s four schedules:
  - On Schedule I, BASF and Bayer quoted *identical* bid prices of USD 2,355,533.<sup>73</sup> Being the lowest evaluated bidders,<sup>74</sup> RITES split the schedule awarding BASF and Bayer each one contract for part of the schedule.<sup>75</sup>
  - On Schedule II, Zeneca and Aventis quoted *identical* prices of USD 3,078,889.<sup>76</sup> However, according to the BER, RITES found

<sup>70</sup> On Jul. 9, 2007, the World Bank Group’s Sanctions Board debarred Nestor Pharmaceuticals Limited for a period of three years, giving “primary weight to the circumstantial evidence of collusion uncovered by INT during the course of its review of procurement documentation associated with the two projects.” The Sanctions Board further explained:

The Sanctions Board considered as *particularly compelling* the evidence relating to an incident of identical pricing between the Respondents [Nestor and Pure Pharma] in a tender in Tamil Nadu, finding that the Respondents had failed to provide an adequate explanation for this incident and that the evidence supported the conclusion that it was more likely than not that Nestor and Pure Pharma *engaged in collusive practices* [emphasis added].

Decision of the Sanctions Board, Sanctions Case No. 71, *In re Nestor Pharmaceuticals Ltd.*, para. 6 (Jul. 9, 2007).

<sup>71</sup> BER of IFB No. RITES/MSM/MCP/15/2000, sec. 4.3.

<sup>72</sup> The result of this split was contracts 144 and 145. BER of IFB No. RITES/MSM/MCP/15/2000, sec. 8.1. The original cost estimate for these contracts was INR 4 million (USD 88,888 at the exchange rate of INR 45 = USD 1), which was far below the Bank’s prior-review threshold of USD 300,000. MCP Credit Agreement, Schedule 3, Part D, para. 2. As a result, according to the documents reviewed by the DIR, the Bank did not review this procurement or provide its No Objection to the contract award.

<sup>73</sup> BER of IFB No. RITES/MSM/MCP/04/2001, sec. 4.3.

<sup>74</sup> According to the BER of IFB No. RITES/MSM/MCP/04/2001, section 5.9, GSW was originally the lowest bidder, but was declared nonresponsive. The BER stated that GSW submitted false performance certificates regarding the past experience of its Chinese pyrethroids supplier. RITES concluded, based on its own due diligence, that the supplier had not delivered pyrethroids in Kenya and Chile, as GSW’s certificates claimed.

<sup>75</sup> BER of IFB No. RITES/MSM/MCP/04/2001, sec. 8.3. The Bank provided its No Objection on February 25, 2002—accepting the split between BASF and Bayer—but indicated that it would refer the matter to INT because of suspicions of collusion. The Bank also noted that INT’s investigation could lead the Bank to refuse to finance the contracts and debar any colluding firms. C. Hoban, Operations Adviser, facsimile to H.S. Suri, Group General Manager, MSM, RITES (Feb. 25, 2002). The letter and supporting documents were forwarded to INT on April 30, 2002, by Mam Chand, a Senior Bank Procurement Specialist in New Delhi.

<sup>76</sup> BER of IFB No. RITES/MSM/MCP/04/2001, sec. 4.3.

Zeneca non-responsive because it did not include the proper bank guarantee.<sup>77</sup> RITES awarded the contract to Aventis.<sup>78</sup>

- *RITES/MSM/MCP/04/2002*. In this tender, Bayer and Syngenta quoted an identical price of USD 741,666 for Schedules II and III.<sup>79</sup> Bayer and BASF quoted identical bid prices of USD 593,333 for Schedule V.<sup>80</sup>

The DIR learned from representatives of UK-based Agropharm, a losing bidder for Schedules I, V, and VIII of Tender 04/2002, that it is “impossible” for companies to reach the same final price for a product like pyrethroids, because of the company and sub-contractor specificity of the various price components.<sup>81</sup> Agropharm’s internal costing sheets shared with the DIR revealed that the final bidding price of pyrethroids is a combination of several components, including raw materials, containers, packing, freight, commissions, overhead, and margins.<sup>82</sup> When informed of competitors submitting identical bids, the Agropharm representatives surmised that a pattern of similar prices on different tenders could result only from a pricing agreement in which companies had prepared their bids together.<sup>83</sup>

*Similar Bid Prices Submitted.* In addition to submitting identical bids, the four firms’ bid prices also frequently clustered within less than 0.5 percent of each other. For example, as Tables 4 and 5 show, the price differential between cartel members for Schedules I and IV of tender number MCP/08/2000 was near or less than 0.1 percent.

**Table 4. Comparisons between Bids for MCP/08/2000—Schedule I (contract P08/2000/126)**

Company	Offer (USD) <sup>a</sup>	Difference between Bids	
Aventis	2,904,922	Bayer and Aventis	0.11%
Bayer	2,908,208	Bayer and Zeneca	0.08%
Zeneca	2,905,861	Zeneca and Aventis	0.03%

<sup>a</sup> Bid prices were quoted in INR.

<sup>77</sup> *Ibid.*, sec. 5.5.

<sup>78</sup> *Ibid.*, sec. 8.3.

<sup>79</sup> BER of IFB No. RITES/MSM/MCP/04/2002, sec. 4.3. Despite efforts by the apparent cartel, as described later in this MCP Chapter, both schedules were awarded to Meghmani, the lowest responsive bidder.

<sup>80</sup> *Ibid.*, sec. 4.3. Despite efforts by the apparent cartel, as described later in this MCP Chapter, the contract was awarded to BR Agrotech, the lowest responsive bidder.

<sup>81</sup> *Ibid.* Agropharm submitted bid prices roughly 50 percent lower than those of the four possibly colluding firms. RITES originally awarded Agropharm the contract MCP/04/2002/197, but Agropharm was unable to implement it because of a failure to obtain a license from the Indian CIB as described elsewhere in the MCP Chapter.

<sup>82</sup> Agropharm confidential costing sheets for the 2002 MCP tenders on which it competed.

<sup>83</sup> Foxon and Shand interview.

Note: RITES' BER did not state cost estimates for each individual schedule, but rather generated an aggregate estimate of all four schedules. The DIR used this estimate to calculate unit costs and then applied that figure to each schedule to determine its estimated cost. The firms' offers are stated at BER of IFB No. RITES/MSM/MCP/08/2000 Opened on 31/10/2000 for Supply of Synthetic Pyrethroids, Section 4.3.

**Table 5. Comparisons between Bids for MCP/08/2000—Schedule IV (contract P08/2000/129)**

Company	Offer (USD) <sup>a</sup>	Difference between Bids	
Aventis	2,271,133	Aventis and Zeneca	0.06%
Bayer	2,272,417	Bayer and Aventis	-0.06%
Zeneca	2,269,667	Zeneca and Bayer	-0.12%

<sup>a</sup> Bid prices were quoted in INR.

Note: RITES' BER did not state cost estimates for each individual schedule, but rather generated an aggregate estimate of all four schedules. The DIR used this estimate to calculate unit costs and then applied that figure to each schedule to determine its estimated cost. The firms' offers are stated at BER of IFB No. RITES/MSM/MCP/08/2000 Opened on 31/10/2000 for Supply of Synthetic Pyrethroids, Section 4.3.

## 2. *Rotation of Contract Awards*

The DIR found indicators that the four companies in the apparent cartel submitted bid prices that would result in a rotation of contract awards among them. As described further below, the bid rotation scheme became more pronounced over time.

Early in the project, under the first tender RITES/MSM/MCP/02/1999, it appears that Zeneca, Bayer, and Agrevo (agent of Aventis)—the first three members of the apparent cartel—were rotating similarly priced bids between them, each taking turns at being the lowest, second lowest, and third lowest bidders.<sup>84</sup> As shown in Table 6 for contracts 106 to 109 under this tender:

- Zeneca was the lowest bidder for the first two of the tender's four contracts—Contracts 106 and 107, barely edging out Bayer—whereas it was the third and fourth lowest bidder on the other two contracts.
- Bayer was the lowest bidder on Contract 108, but was second lowest on Contracts 106 and 107 and fourth lowest on Contract 109.

<sup>84</sup> At this point, Aventis was represented by an agent, Agrevo, and may not have been a member of the newly forming apparent cartel. BASF did not appear to join the apparent cartel until the second pyrethroid tender.

- Agrevo (or Aventis), which was third lowest on the first two contracts and second lowest on Contract 108, appeared to be in line to win Contract 109 by barely edging out Zeneca and Bayer. However, the apparent cartel's plans were spoiled as Agrevo was significantly underbid by Acco Industries (or Cyanamid), the only contract in this tender it bid on.<sup>85</sup>

**Table 6. Rotation of Contracts among the Cartel Members under Tender P02/1999 (Values in INR)**

Company	Contract P02/1999/106		Contract P02/1999/107		Contract P02/1999/108		Contract P02/1999/109	
	Offer	Rank	Offer	Rank	Offer	Rank	Offer	Rank
Zeneca	<b><i>76,541,875</i></b>	<b><i>L1</i></b>	<b><i>94,488,000</i></b>	<b><i>L1</i></b>	141,585,625	L3	174,957,500	L3
Bayer	76,680,281	L2	94,587,219	L2	<b><i>141,330,312</i></b>	<b><i>L1</i></b>	175,023,594	L4
Agrevo (Agent of Aventis, later acquired by Aventis)	76,807,100	L3	94,640,400	L3	141,540,500	L2	174,816,500	L2
Acco Industries (or Cyanamid, later BASF)							<b><i>125,114,000</i></b>	<b><i>L1</i></b>
Rajat Enterprises	94,708,500	L4	116,649,500	L4	174,496,000	L4	215,965,000	L5

Note: The winning firm is listed in bold, italicized red text.

Source: RITES procurement data.

In MCP's next tender for pyrethroids, Tender RITES/MSM/MCP/08/2000 in 2000, all four members of the apparent cartel appeared to collude to evenly divide the contracts between them.<sup>86</sup> As shown in Table 7, the bidders rotated their bid prices from lowest (L1) to highest (L3 or L4), allowing each one of the four bidders to win exactly one contract within the tender.<sup>87</sup>

<sup>85</sup> Cyanamid, which was represented by Acco Industries for this tender, appeared to not be colluding with the other firms at this early stage because it: (1) submitted a complaint alleging that these three firms were operating in a cartel; and (2) bid significantly lower than these firms to win a contract under the tender. Complaint from J.L. Chambers, Asst. Dir. for Int'l Project Funding, American Home Products (Cyanamid's parent firm) re: collusion on tender RITES/MSM/MCP/02./1999 (Mar. 15, 2000); BER of IFB No. RITES/MSM/MCP/02/99, sec. 4.3 (low bid for contract). Cyanamid was subsequently acquired by BASF, a member of the apparent cartel. RITES itself later acknowledged that although Cyanamid submitted lower bid prices than the other three firms when it first entered the market, its prices later aligned with those of the three firms when it was part of BASF. BER of IFB No. RITES/MSM/MCP/04/01, p.11, para. 1. INT was unable to substantiate Cyanamid's complaint of a cartel at the time the complaint was made.

<sup>86</sup> Although Cyanamid bid on only one of the four contracts in Tender P08/2000, its bid's close proximity in price to the prices bid by the other three apparent cartel members suggests that it was operating as a member of the apparent cartel for Contract 128.

<sup>87</sup> BER of IFB No. RITES/MSM/MCP/08/2000, sec. 4.3 and sec. 8.1. In the context of this Report, L1 represents the lowest-priced evaluated bidder. L2 represents the second lowest-priced evaluated bidder. L3 represents the third lowest-priced evaluated bidder, and so on.

**Table 7. Rotation of Contracts among the Cartel Members under Tender P08/2000 (Values in INR)**

Company	Contract P08/2000/126		Contract P08/2000/127		Contract P08/2000/128		Contract P08/2000/129	
	Offer	Rank	Offer	Rank	Offer	Rank	Offer	Rank
Aventis	<b>130,721,500</b>	<b>L1</b>	85,914,000	L2	87,518,900	L4	102,201,000	L2
Bayer	130,869,375	L3	<b>85,851,563</b>	<b>L1</b>	87,469,063	L2	102,258,750	L3
Cyanamid (later BASF) <sup>a</sup>					<b>86,515,625</b>	<b>L1</b>		
Zeneca	130,763,750	L2	85,955,625	L3	87,486,719	L3	<b>102,135,000</b>	<b>L1</b>

<sup>a</sup> BASF purchased Cyanamid in a merger that closed on July 1, 2000. BASF News Release, *American Cyanamid Acquisition by BASF Closed within Three Months* (June 30, 2000). Acco Industries represented BASF in India.

Note: The winning firm is listed in bold, italicized red text.

Source: RITES procurement data.

The MCP's following pyrethroids tender, RITES/MSM/MCP/04/2001 in 2001, consisted of only two schedules, for the award of only two contracts. As before, all four members of the apparent cartel submitted bids that would result in a rotation of contract awards. However, for this particular tender, which was limited to two schedules, the members also submitted in pairs identically priced bids; a scheme apparently designed to double the number of potential winners from two to four. Splitting of contract awards between the two identically priced bidders would enable each one of the four members of the apparent cartel to win a contract, instead of only two members.

As shown in Table 8, the apparent rotation and contract splitting schemes worked—Bayer and BASF submitted identically priced low bids on Schedule I and the contract was split between them.<sup>88</sup> On Schedule II, Aventis and Zeneca, the other two members, submitted identical lowest-priced bids—except that Zeneca was disqualified by RITES for submitting a faulty bid security.<sup>89</sup>

<sup>88</sup> BER of IFB No. RITES/MSM/MCP/04/2001, sec. 8.1.

<sup>89</sup> *Ibid.*, secs. 4.3 and 5.5.

**Table 8. Rotation of Contracts among Cartel Members under Tender MCP/04/2001 (Values in INR)**

All Bidders	Contracts P04/2001/163 & 164 (Sch. I)			Contract P04/2001/165 (Sch. II)		
	Cost Estimate	100,000,000	Rank	Cost Estimate	120,000,000	Rank
	Offer	Variation/ Cost Estimate		Offer	Variation/ Cost Estimate	
GSW	65,000,000	-35.00%	NR	85,000,000	-29.17%	NR
Bayer	<b>105,990,000</b>	<b>5.99%</b>	<b>L1</b>	138,890,000	15.74%	L2
BASF	<b>105,990,000</b>	<b>5.99%</b>	<b>L1</b>	No Bid		
Aventis	106,210,000	6.21%	L2	<b>138,550,000</b>	<b>15.46%</b>	<b>L1</b>
Zeneca	No Bid			138,550,000	15.46%	NR

NR = non-responsive

Note: Winning bidders are listed in bold, italicized red text. The possibly colluding firms are boxed in red.

Source: RITES procurement data.

Also an indicator of collusive behavior is the mathematically symmetric characteristics of the supporting (*i.e.*, higher-priced) bids submitted by the *losing* cartel members, which is done to create the appearance of competition. For Schedule I, Aventis submitted a losing bid that was 0.2 percent higher than the two lowest identically priced bids. For Schedule II, Bayer submitted the losing bid, which was also 0.2 percent higher than the lowest identically priced bids.<sup>90</sup>

### *3. Pyrethroid Contracts Were Equally Split among the Apparent Cartel Members*

Over the course of the entire project, four companies won 91 percent of the total value of pyrethroid contracts, as shown in Table 9. The DIR found that the total number and dollar value of the contracts awarded to each of the four companies were of similar values, suggesting that the companies conspired in some manner to share the contract awards among themselves (Table 9).

<sup>90</sup> *Ibid.*, sec. 4.3. The fact that BASF and Zeneca each did not bid on one of the schedules does not contradict their participation in possible collusion, but rather may indicate an attempt by the colluding firms to save costs by minimizing the number of bidders for each contract.

**Table 9. Summary of the Contracts Awarded to the Apparent Cartel**

Company	Number of contracts	Percent of Contracts	Percent of the Total Amount
Aventis	5	17.2	21.6
BASF	6	20.7	25.9
Bayer	6	20.7	20.3
Zeneca/Syngenta <sup>a</sup>	4	13.8	23.5
Total Cartel	21	72.4	91.3

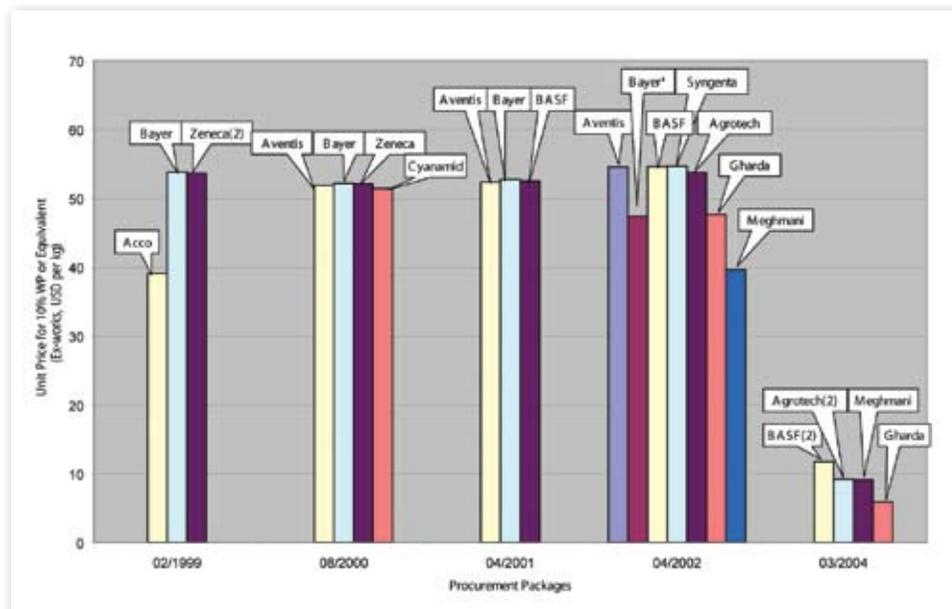
<sup>a</sup> In November 2000, Novartis' Agribusiness division and AstraZeneca's Agrochemicals division spun off from their parent firms and merged to become Syngenta. AstraZeneca Press Release, *AstraZeneca Circulates Syngenta Merger Information to Shareholders* (Sept. 18, 2000).

#### 4. Inflated Prices

The DIR found that prices of the pyrethroid contracts won by the members of the apparent cartel were significantly higher than (1) the prices of the few contracts won by other companies and (2) the prices of contracts awarded in 2004, simultaneous with the disappearance of collusive indicators.

*Wettable Powder Pyrethroid Contracts (Five Tenders)*. Figure 6 illustrates the drastic differences in prices—upwards of 80 percent—between the contracts for the wettable powder form of pyrethroid awarded to the members of the apparent cartel and the prices of contracts awarded to non-cartel companies (1) prior to 2004, when the apparent cartel was operating; and (2) in 2004 after the apparent cartel was dissolved.

**Figure 6. Unit Prices of All Contracts Awarded for Wettable Powder Pyrethroids**



<sup>a</sup> Bayer's price was lowered at contract award. Its original bid price was USD 55.39 per kilogram (10 percent WP, ex-works).

Note: Unit Price does not include packing, shipping, or other incidental costs.

Source: RITES procurement data.

As described previously, the members of the apparent cartel were again Aventis, BASF/Cyanamid, Bayer, and Zeneca/Syngenta. The indicators of collusive behavior among these members ceased for the 2004 tender (03/2004).

Tender RITES/MSM/MCP/04/2002 (labeled as 04/2002 in Figure 6) best demonstrates that the apparent cartel was successful at winning contracts with inflated prices even in the face of limited competition from others. That tender offered eight schedules for bid. Three local competitors—Agrotech, Gharda, and Meghmani—won three of the seven contracts<sup>91</sup> by submitting bid prices 25–30 percent lower than prices quoted by the four apparently colluding firms. However, because these firms were small providers of the insecticide, they were able to win only one contract each due to the high volume capacity requirements of each schedule bid on.<sup>92</sup> Having reached their maximum capacity limits after winning only one con-

<sup>91</sup> Meghmani was awarded two of the eight schedules (Schedules I and II) that were under bidding in this tender. These two schedules were grouped under one contract leading the total number of contracts signed under MCP/04/2002 to seven for a total of eight schedules in competition.

<sup>92</sup> The contracts required the successful candidate to have previously produced and marketed at least 80 percent of the quantities bid for. The smaller local companies usually reached their maximum capacity limits after winning only one contract, rendering them ineligible to be evaluated for other contracts, leaving as the only remaining eligible bidders the members of the apparent cartel.

tract, the local firms could not compete for any other schedules, leaving as the only remaining bidders the members of the apparent cartel, to win the larger contracts at much higher prices. And as described previously, the apparent cartel—as in this and other tenders—divided the remaining contracts between them by submitting rotating bids.<sup>93</sup>

Other findings to support the indicator of inflated high prices:

- Agropharm's unsuccessful bids for three schedules under the 04/2002 tender support the indicator. Agropharm was a new, foreign entrant into the Indian pyrethroid market and successfully proposed a technically responsive product and initially won a contract, quoting a price of nearly one-half that of the next highest bidder, Bayer.<sup>94</sup> Yet despite the significant price differential, Agropharm was still estimating to make a profit margin of 25–30 percent.<sup>95</sup> However, the Government of India ultimately denied Agropharm a license required to implement the contract, and RITES awarded the contract to Bayer instead, the next lowest bidder.<sup>96</sup>
- A comparison of contract prices before the 2004 tender with contract prices achieved with the 2004 tender further supports the indicator. For the 2004 tender of wettable powder—simultaneous with the disappearance of all other indicators of collusive behavior—the average unit price of a contract was 82 percent lower than the average price of all previous tenders combined, as shown in Figure 6.<sup>97</sup>

<sup>93</sup> Under tender RITES/MSM/MCP/04/2002, companies were bidding for eight schedules. However, Schedules I and II were both won by Meghmani, so the two schedules were combined into one contract, reducing the expected number of contracts awards by one to seven.

<sup>94</sup> BER of IFB No. RITES/MSM/MCP/04/2002, sec. 4.3; Supplementary BER of IFB No. RITES/MSM/MCP/04/2002, sec. 4.3. The contract's technical specifications called for a certain volume of a 2.5 percent concentration of a certain type of pyrethroid, but firms could supply other concentrations with different active ingredients if that the final volume and concentration were equivalent. In this case, Agropharm and Bayer bid at different concentrations with different active ingredients. Accordingly, the DIR corrected for this difference by adjusting Agropharm's 2.5 percent concentration price (USD 7.9 per kg) to a 10 percent concentration. After this adjustment, Bayer's price was USD 47 per kg while Agropharm's price was USD 25.1 per kg.

<sup>95</sup> Foxon and Shand interview, Managing Director, Agropharm UK, para. 5 (May 4, 2007).

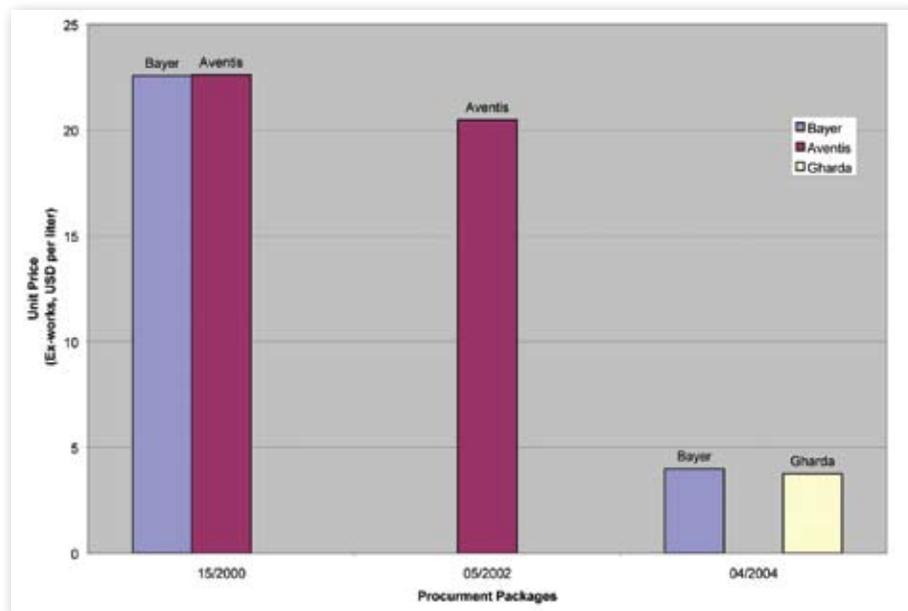
<sup>96</sup> RITES Notification of Award of IFB No. RITES/MSM/MCP/04/2002 to Bayer India Ltd. (Dec. 15, 2003). The DIR notes that the Bank did not give its No Objection to the cancellation of the contract to Agropharm, causing the Ministry of Health and Family Welfare to fund the contract out of its own budget. R. Benmessaoud, World Bank Operations Adviser, facsimile to R. Gupta, Add'l General Manager, RITES (Sept. 30, 2003) (no No Objection); Request for Legal Opinion made by G.P.S. Dhillon, Joint Director, NAMP, to Law Officer, Dte. GHS (Nov. 27, 2003) (government funding).

<sup>97</sup> According to the DIR's calculations, the average price for a kilogram of 10 percent equivalent concentration pyrethroid dropped from USD 50.82 for the first four tenders (02/1999, 08/2000, 04/2001, and 04/2002) to USD 8.98. The DIR was unable to identify the precise cause of this price decrease, in part because broader market data was unavailable. But it seems unlikely that general market changes would cause the price to decrease this greatly. In fact, one would expect the larger contracts—the ones awarded to the members of the apparent cartel—to be bid at lower prices due to their inherent benefit of large economies of scale from being large producers of large volumes. Yet here, the opposite occurred.

- A representative of Global Spin Weave (GSW), a losing bidder that quoted much lower prices than the four possibly colluding firms, told the DIR that the winning bidders' prices were not justified by any particular expertise or technical specification because raw materials comprised a large percentage of the total cost of pyrethroids. He concluded that, based on GSW's cost structure, even after adding a comfortable profit margin and the cost of additives and inert ingredients, the prices quoted by the winning members of the four firms were not justified.<sup>98</sup>

*Liquid Pyrethroids (Three Tenders).* A similar trend to the prices of wettable powder pyrethroids was observed for the liquid pyrethroid contracts. As shown in Figure 7, there was a significant drop in price between the first two tenders and the final tender, which occurred after the indicators of collusive behavior disappeared.

**Figure 7. Unit Price of All Contracts Awarded for Five-Percent Liquid Pyrethroids (or Equivalent)**



Note: Unit Price does not include packing, shipping, or other incidental costs.

Source: RITES procurement data.

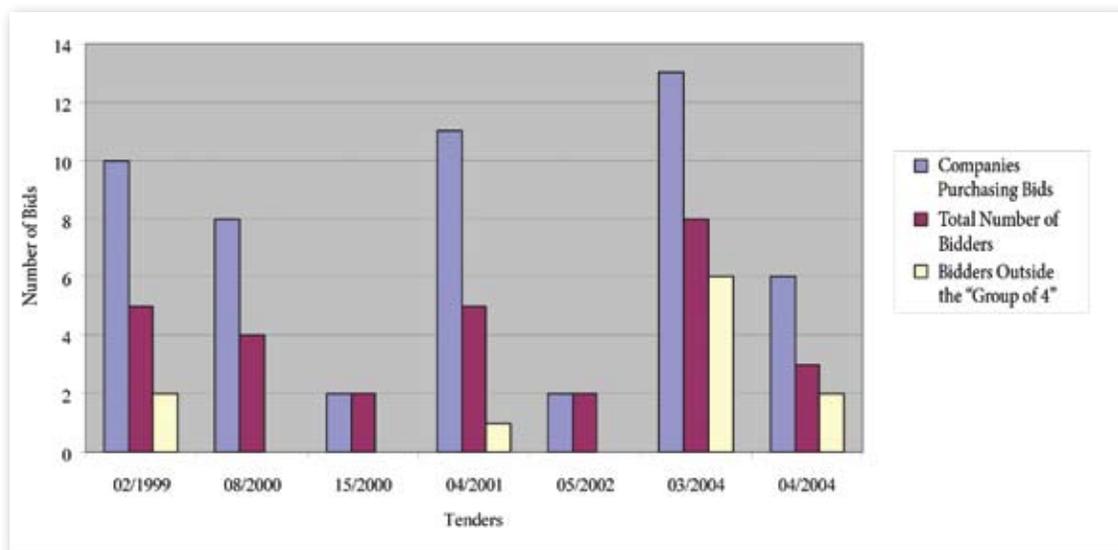
### 5. Limited Competition

The DIR found that from 1999 until 2004, the number of companies bidding for pyrethroids other than the members of the apparent cartel was low. As shown

<sup>98</sup> At the time of GSW's bid submissions under tender RITES/MSM/MCP/04/2001, it had identified a Chinese supplier in Shenzhen which would deliver the raw materials at INR 120/kg. GSW's quote was 38.7 percent lower than Bayer and BASF, which quoted the same price for the contract 164 and each won half of the total contract, and 63 percent lower than Aventis, the winner of contract 165.

in Figure 8, although there was generally heightened interest in firms seeking to bid, as evidenced by the firms that purchased bidding documents, the number of bidders outside of the apparent cartel ultimately submitting bids was minimal, or even zero, for the first five pyrethroid tenders. The number drastically increased for the 2004 tenders (03/2004 and 04/2004 in the figure), when the other indicators of collusive behavior vanished. At the very least, the presence of the cartel appeared to adversely affect the fair and open competitiveness of the pyrethroid tenders.

**Figure 8. Summary of Tenders Showing a Limited Number of Bidders**



Source: RITES procurement data.

#### 6. *Complaints Corroborate Cooperation among the Four Firms*

During the MCP, the Bank received 24 complaints regarding pyrethroids tenders, the largest number of complaints regarding any MCP component. Many of these complaints corroborate the indicators of an apparent cartel by specifically referring to either the operation of a cartel or obstacles to entering the Indian pyrethroids market.<sup>99</sup> The complaints alleged the following:

- Four companies—Aventis, BASF, Bayer and Zeneca—operated as a cartel to win contracts.<sup>100</sup>

<sup>99</sup> In total, the Bank received 63 complaints under the MCP. Out of these 63, INT was the recipient of 10 and the rest were addressed to the procurement hub in Delhi. Twenty-four of the complaints referred to the procurement of pyrethroids.

<sup>100</sup> Record of Interview of GSW, last para. (Jun. 9, 2004); Record of Interview of GSW, paras. 3–4 (Apr. 27, 2007).

- Aventis, Bayer, and Zeneca were colluding on pyrethroids contract tenders.<sup>101</sup>
- Collusion was possible by Bayer and BASF, which quoted the same prices on the tender for MCP/04/2001.<sup>102</sup>

A confidential witness also alleged that Bayer and Aventis were “pooling” under the MCP for the award of pyrethroids spray contracts, and that a manager at Bayer’s office in India was making payments to Indian government officials.

The DIR also noted a pattern of complaint activity by the members of the apparent cartel. The member firms—particularly Aventis, BASF, and Bayer—would submit a battery of complaints against a competing bidder whenever that bidder attempted to undercut the prices bid by the cartel (which were always similar in amount, as described previously in this MCP Chapter). In contrast, and consistent with their potential collusive interest, the four member firms of the apparent cartel never submitted complaints against each other.

- For example, in tender MCP/02/1999, Cyanamid had undercut the price of the apparent cartel by 28 percent.<sup>103</sup> At the time, there is no indication that Cyanamid was a member of the apparent cartel. Aventis, who was a member of the apparent cartel and was the next lowest bidder to Cyanamid, issued a complaint against Cyanamid attempting to disqualify its bid.<sup>104</sup> Cyanamid responded by issuing two complaints of its own alleging that a cartel was in operation and influencing the tender’s procurement process.<sup>105</sup> However, as noted previously, this was also the only time that Cyanamid complained against the cartel. Following its purchase by BASF in 2001, BASF appeared to join the colluding firms, quoted unit prices in line with their bids, and never complained against the cartel’s other members.<sup>106</sup>

<sup>101</sup> Complaints from J.L. Chambers, Asst. Dir. for International Project Funding, American Home Products (Cyanamid’s parent firm) (Mar. 10 and Apr. 13, 2000).

<sup>102</sup> Mam Chand, Sr. Procurement Specialist, SARPS, Apr. 30, 2002, Office Memorandum to Joseph Scafidi, Department of Institutional Integrity, World Bank.

<sup>103</sup> Cyanamid’s offer for contract MCP/02/1999/109 (Schedule III) was INR 125,214,000; Aventis, the next-lowest bidder, offered INR 174,816,500. BER of IFB No. RITES/MSM/MCP/02/99, sec. 4.3. Cyanamid eventually won contract 109 under the tender with a bid price 28 percent lower than Aventis’ price, the next lowest bidder. BER of IFB No. RITES/MSM/MCP/02/99, sec. 4.3.

<sup>104</sup> G. Halls, Aventis CropScience, letter to H. Schaeffer, World Bank Executive Director (Mar. 17, 2000). There were also three other complaints—from firms outside of the apparent cartel—issued against Cyanamid attempting to disqualify its bid: A. Landragin, Swedish Products, Inc., letter to R. Skolnik, World Bank Senior Director (Mar. 15, 2000); S. Srivastava, Rajat Enterprises, letter to A. Bhandari, World Bank Operations Advisor (Mar. 28, 2000); A. Landragin, Landrock Global, letter to A. Litvak, World Bank (April 12, 2000).

<sup>105</sup> Complaints from J.L. Chambers, Asst. Dir. for Int’l Project Funding, American Home Products (Cyanamid’s parent firm) (Mar. 10, 2000, and Apr. 13, 2000) to the U.S. Executive Director for the World Bank.

<sup>106</sup> For example, Cyanamid won contract 128 under tender MCP/08/2000 issued in June 2000 with only a

- As another example, tender number 04/2002 was the subject of 10 complaints, the largest grouping of pyrethroids complaints received during the MCP.<sup>107</sup> As described previously, RITES initially awarded contract number 197 of this tender (Schedule VIII) to Agropharm.<sup>108</sup> However, because Agropharm was not able to obtain a license from India's Central Insecticide Board (CIB), RITES awarded the contract to Bayer, a member of the apparent cartel, whose bid was over twice Agropharm's.<sup>109</sup> Consequently, Agropharm UK and Mr. D.B. Jain, its agent in India from SSG Investment, complained four times to either the Bank or RITES. These complaints made allegations about multiple parties—including the four possibly colluding firms, RITES, and the CIB—and referred to the operation of a cartel, the unduly excessive prices offered by the local companies, discrimination against non-domestic producers, and the obstacles to obtaining a CIB license.<sup>110</sup> In parallel, the four possibly colluding firms complained about Agropharm six times.<sup>111</sup>

## B. Indicators Ceased in 2004, Implying an End to Collusion

As described previously, multiple consistent indicators of collusive behavior appeared throughout the first six tenders of pyrethroids, which were offered from 1999 to 2002. As summarized in Table 10, however, the same indicators were not present or as clear to discern for the final two tenders in 2004.

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1.2 percent price difference to Aventis the next lowest bidder.

<sup>107</sup> None of these complaints were referred to INT.

<sup>108</sup> BER of IFB No. RITES/MSM/MCP/04/2002 for Schedule VIII, sec. 7.1.1.

<sup>109</sup> RITES Notification of Award of IFB No. RITES/MSM/MCP/04/2002 to Bayer India Ltd. (Dec. 15, 2003); BER of IFB No. RITES/MSM/MCP/04/2002 for Schedule VIII, sec. 4.3.

<sup>110</sup> B.K. Shand, Managing Director, Agropharm Ltd., facsimile to S.P. Aggarwal, Chairman, CIB (Feb. 21, 2003) (requesting that the CIB expedite the issuance of a registration certificate to Agropharm); B.K. Shand, Managing Director, Agropharm Ltd., letter to R. Gupta, Add'l General Manager, RITES (Mar. 14, 2003) (asserting that Agropharm supplied pyrethroids to Saudi Arabia and alleging a collusion scheme); SSG Investments Pvt. Ltd. Letter to World Bank (May 8, 2003) (complaining of requirement to obtain registration certificate from CIB); D.B. Jain, Director, SSG Investments, letter to S.P. Aggarwal, Chairman, CIB (Sept. 8, 2003) (complaining of the CIB's refusal's to issue a registration certification).

<sup>111</sup> S.S. Mohla, General Manager, Bayer India Ltd., letter to Group General Manager, RITES (Jan. 10, 2003); S.S. Mohla, General Manager, Bayer India Ltd., letter to Group General Manager, RITES (Feb. 10, 2003); S.S. Mohla, General Manager, Bayer India Ltd., letter to Group General Manager, RITES (May 12, 2003); G. Hesse and P. Day, Global Vector Control Management, Bayer Environmental Science, letter to S. Krishnan, SARPS, *et al.* (Oct. 13, 2003) (complaining of Agropharm's failure to obtain a CIB registration certificate); G. Hesse and P. Day, Global Vector Control Management, Bayer Environmental Science, letter to S. Krishnan, SARPS, *et al.* (Oct. 13, 2003) (complaining that Agropharm misrepresented past sales to Saudi Arabia); G.K. Singh, BASF India Ltd., letter to the Group General Manger of RITES *et al.* (Feb. 7, 2003) (complaining that companies that do not have licenses for their product in India should not be authorized to import).

**Table 10. Variation in Indicators Before and During 2004**

Indicator Type	Prior to 2004	2004
Identical bid prices submitted	Yes	No
Similar bid prices submitted	Yes	No
Rotation of winners	Yes	No
Contract wins divided equally	Yes	No
Contracts monopolized by the four possibly colluding bidders / limited competition	Yes	No
Disqualification of other bidders who offer more competitive prices	Yes	No
Inflated prices	Yes	No
Number of procurement-related complaints issued	High	Low

The DIR identified, but could not confirm, several potential explanations behind the change in bidder behavior in 2004:

- According to the project team, a number of local companies decided to register with the CIB, making them eligible to compete for MCP pyrethroids tenders.<sup>112</sup>
- The merger of two of the possible colluding firms—Bayer and Aventis—may have disrupted the cartel and prompted its breakup.<sup>113</sup>
- A RITES manager did not serve on RITES' bid evaluation committee for the last three MCP pyrethroids tenders. A confidential witness alleged that Bayer and Aventis were paying bribe to this senior RITES official.

Nonetheless, the sudden, simultaneous disappearance of the numerous indicators is itself a further indicator that the four firms may have been colluding from 1999 up to 2004.

## Bed Nets

Medicated mosquito nets (bed nets) comprised 14 of the 92 ICB and NCB contracts (15 percent) awarded through RITES and reviewed by the DIR. As shown in Table 11, these contracts were tendered in five packages from 2000 and 2005 totaling USD 11.8 million and awarded to seven different suppliers.

<sup>112</sup> This analysis is empirical and is not the result of a documented survey.

<sup>113</sup> The merger between Bayer Cropscience and Aventis Cropscience was officially completed in March 2004 as per Bayer AG. Press released dated March 8, 2004.

**Table 11. MCP Bed Net Contracts Procured by RITES**

Contract Number	Supplier	Contract Description (number of bed nets)	Contract Amount (USD)
RITES/MSM/MCP/09/2000/117	Issa Industries	60,000	221,986
RITES/MSM/MCP/12/2000/140	R.S. Industries	325,000	1,110,259
RITES/MSM/MCP/09/2002/189	Vestergaard Frandsen	230,000	447,770
RITES/MSM/MCP/02/2003/216	Global Spin Weave Limited	240,000	449,526
RITES/MSM/MCP/02/2003/217	Chemicals International	120,000	245,805
RITES/MSM/MCP/02/2003/218	EMCO Enterprises	360,000	658,608
RITES/MSM/MCP/02/2003/224	Chemicals International	55,600	113,834
RITES/MSM/MCP/02/2003/225	Vestergaard Frandsen	194,400	390,126
RITES/MSM/MCP/02/2003/226	Vestergaard Frandsen	230,000	461,569
Rites/MSM/MCP/08/2004: Schedules 1 and 4	Chemicals International Ltd.	530,000	1,071,003
Rites/MSM/MCP/08/2004: Schedules 2 and 7	Global Spin Weave Limited	705,000	1,463,890
Rites/MSM/MCP/08/2004: Schedules 9 and 10	Argas Consultancy	450,000	753,435
Rites/MSM/MCP/08/2004: Schedules 3, 5, and 8	Vestergaard Frandsen	830,000	1,726,052
Rites/MSM/MCP/08/2004: Schedules 6, 11, 12, and 13	EMCO Enterprises	1,285,000	2,668,225
<b>Total</b>		<b>5,615,000</b>	<b>11,782,088</b>

Source: RITES procurement data.

The DIR found a variety of indicators of fraud and corruption and other problems associated with the procurement and implementation of the MCP project, for example: (1) one supplier failed to fulfill its contract on time; (2) the project was suspended in part due to procurement bottlenecks; (3) two contracts were canceled due to fraudulent misrepresentations by two separate suppliers; and (4) the project received numerous complaints about poor quality bed nets being supplied.

More specifically, the DIR found indicators of fraud and corruption related to five of the seven suppliers of bed nets:

- *The “Agrawal Companies.”* These represent a group of companies the DIR found to be related to one another through familial ties. They are contract winners GSW and EMCO Enterprises (EMCO)—which won four of the 14 bed net contracts representing 44 percent of the total value of bed net contracts—and bidders Superior Fabrics (Superior) and HAL Offshore,

Ltd. (HAL). Superior was positioned to win bed net contracts, but was prevented by the Borrower from doing so due to Superior's history of supplying poor quality nets. Nonetheless, despite the Borrower's attempts to prevent Superior from winning contracts, it appears that two other Agrawal Companies were used to circumvent the "blacklisting" of Superior and win bed net contracts for the group. The DIR found indicators that at least one of the Agrawal Company suppliers, EMCO, did deliver poor quality bed nets. Furthermore, the presence of multiple related companies bidding on contracts likely affected the competitiveness of the bidding process, contravening the Bank's procurement guidelines.<sup>114</sup>

- *R.S. Industries.* A winner of the second tender, R.S. Industries delayed its deliveries for two years and ultimately supplied 60,000 fewer bed nets than specified in the contract.<sup>115</sup> This contract may have partially contributed to the Bank's temporary suspension of the MCP, which at the time was suffering from critical procurement bottlenecks. In addition, the DIR found indicators that R.S. Industries and another bidder, B.R. & Sons, colluded with the Agrawal Companies to enable the Agrawal Companies to win contracts by providing falsified supporting bids and by supplying them with fraudulent performance certificates.
- *Vestergaard Frandsen.* A winner of four bed net contracts, Vestergaard Frandsen was found to have misrepresented the source of its manufacturing facilities. Consequently, its contract was cancelled during the fifth tender by the Borrower resulting in no bed nets being delivered.
- *Chemicals International.* A winner of three contracts, Chemicals International, was found to have submitted false performance certificates. Its contract under the fifth tender was ultimately cancelled, resulting in no bed nets being delivered.

Some of these problems were detected and dealt with by the Borrower (Chemicals, Vestergaard, Superior), but some were not (The Agrawal Companies).

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<sup>114</sup> According to paragraph 1.15 (a) (ii) of the "Procurement Guidelines under IBRD Loans and IDA Credits August 1996 edition applicable to MCP, collusive practices among bidders were considered as fraudulent practices and could lead to misprocurement and debarment."

<sup>115</sup> Memo entitled, "In the matter of alleged disputes raised by M/S R.S. Industries against NOA No. RITES/MSM/MCP/12/2000/140 dated 30.01.2001 for supply of bed nets. Ref: NWVDCP's14-1/2003/NAMP/EMCP-court case dated 08.11.2005 forwarding MOH&FW letter no. M.4014/27/2005-Mal dated 06.09.05." RITES cancelled the missing 60,000 bed nets and deducted liquidated damages from the contract. *Ibid.*

## A. The Agrawal Family Businesses Exhibited Indicators of Engaging in Collusive Practices

In 2000, Vestergaard Frandsen India Pvt. Ltd. (Vestergaard) complained to RITES that Superior—the lowest bidder on three contracts for which Vestergaard also bid—had supplied poor quality bed nets in a non-Bank contract and was associated with two other bidders under the tender: GSW and EMCO.<sup>116</sup> RITES investigated the allegations and declared Superior unresponsive because it supplied poor quality bed nets in the past.<sup>117</sup> However, RITES reviewed GSW and EMCO's bids and concluded that Vestergaard's collusion allegation was not credible.<sup>118</sup>

In contrast to RITES' findings, the DIR found indicators strongly suggesting that GSW, EMCO, and Superior were associated with each other, as the complaint alleged. The DIR further found that a fourth firm competing for MCP bed net contracts—HAL—was connected to GSW, EMCO, and Superior (collectively, the Agrawal Companies).<sup>119</sup> Sudhir Agrawal (Sudhir), Director of GSW, personally admitted to the DIR that he, his cousins Sanjeev and Pradeep Agrawal, and Sanjeev's wife Deepti Agrawal were the owners of those four businesses.<sup>120</sup> Sudhir explained that textiles are an Agrawal family business that has been passed down from generation to generation.<sup>121</sup> Sudhir described to the DIR the relationships among the family members' businesses (Figure 9).

<sup>116</sup> N. Garg, Asia Regional Director, Vestergaard Frandsen Group, e-mail to D. Baxi, World Bank Senior Procurement Specialist (Jun. 4, 2003).

<sup>117</sup> Brief Note for the Meeting of Purchase Advisory Committee to be Held for Procurement of Mosquito Bed Nets under World Bank Financed Enhanced Malaria Control Project against RITES IFB No. RITES/MSM/MCP/02/2003 opened on May 20, 2003, p. 3. During its investigation, the Directorate of the NAMP informed RITES that Superior had provided bed nets to consignees in Assam and Manipur that "failed to meet the BIS specification which was required as per the contract in a number of areas." G.P.S. Dhillon, Joint Director, NAMP, letter to R. Gupta, Add'l General Manager, RITES (Jun. 26, 2003).

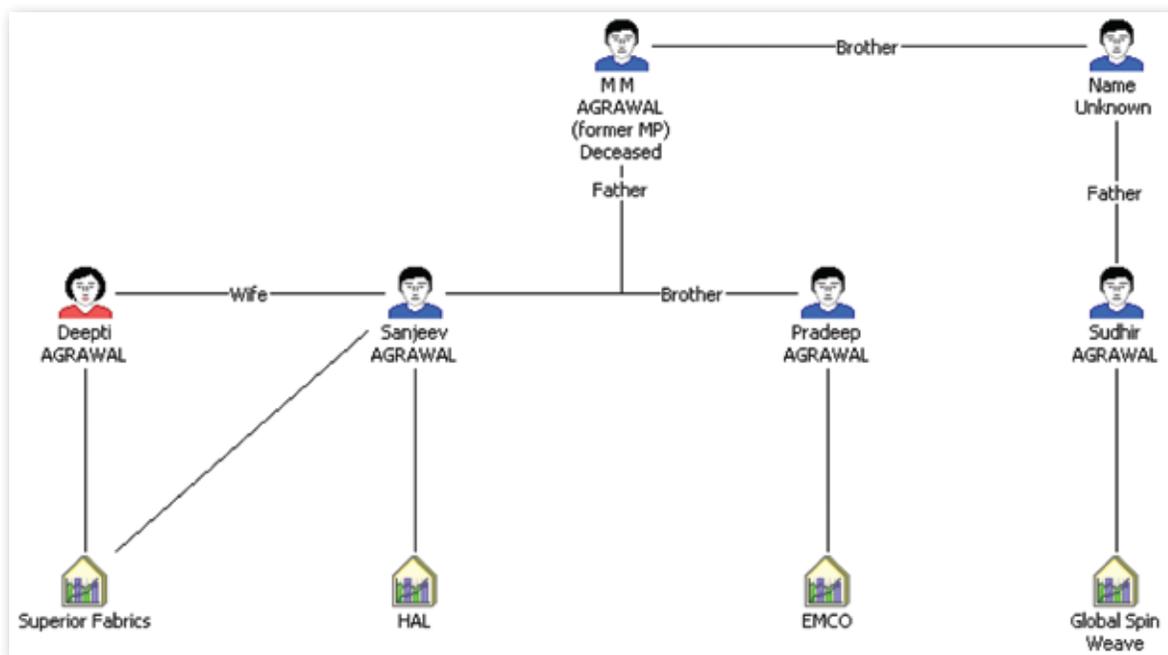
<sup>118</sup> Brief Note for the Meeting of Purchase Advisory Committee to be Held for Procurement of Mosquito Bed Nets under World Bank Financed Enhanced Malaria Control Project against RITES IFB No. RITES/MSM/MCP/02/2003 (Annexure II), p. 12. RITES' reasoning is detailed in the RITES section, below.

<sup>119</sup> Interview of Sudhir Agrawal, Executive Director, Global Spin Weave Limited (Apr. 27, 2007). (Sudhir Agrawal Apr. 2007 interview.

<sup>120</sup> Sudhir Agrawal Apr. 2007 interview.

<sup>121</sup> Sudhir Agrawal Apr. 2007 interview.

**Figure 9. Sudhir Agrawal's Representation of Family Relations between Competing Company Owners**



Source: Based on documents detailed in text.

In addition to having close relatives owning seemingly competing businesses, Sudhir also acknowledged that the Agrawal family had political connections.<sup>122</sup> One of the connections was likely Sudhir's uncle, the late M.M. Agrawal, who was the father of the directors of Superior, HAL, and EMCO.<sup>123</sup> M.M. Agrawal had served as a Member of Parliament (Rajya Sabha) and had been a member of the sub-committee for the Ministry of Small Scale Industries.<sup>124</sup> However, Sudhir downplayed any possible political benefits by explaining that M.M. Agrawal had not been connected with GSW since 2000.<sup>125</sup>

Despite the businesses' familial connections, Sudhir stated that the companies did not engage in any collusive practices and, instead, regularly competed against each other.<sup>126</sup> Sudhir also asserted that Superior, EMCO, GSW, and HAL were owned and managed separately with their own facilities and employees. Yet Sudhir also admitted that he periodically provided professional support to Superior and

<sup>122</sup> Interview with Sudhir Agrawal, Executive Director, Global Spin Weave Limited (May 11, 2005).

<sup>123</sup> HAL Offshore Ltd., Draft Red Herring Prospectus, p. 40 (Dec. 30, 2006), <http://www.sebi.gov.in/dp/haldrf.pdf> (HAL Prospectus).

<sup>124</sup> Press Release to be published in *The Gazette of India*, Part 1 (Mar. 2005), <http://ssi.nic.in/4.pdf>.

<sup>125</sup> Record of Interview with Sudhir Agrawal, Executive Director, Global Spin Weave Limited (Jun. 15, 2004).

<sup>126</sup> Sudhir Agrawal Apr. 2007 interview.

that all family members served on the boards of directors of HAL's primary shareholding companies.<sup>127</sup> Sudhir added that the Agrawal family's businesses also occasionally shared infrastructure, such as phone numbers and office space.<sup>128</sup> For example, INT's first interview with Sudhir was conducted at Superior House, 25, Bazar Lane, Bangali Market, Ground Floor, New Delhi; this is both EMCO's official office address (according to its bid submission cover sheets) and the listed residence of Prabha Agrawal, the mother of Sanjeev Agrawal, Director of HAL, and Pradeep Agrawal, Director of EMCO.

The DIR confirmed Sudhir's explanation of the links among the Agrawal family-owned businesses through a review of their bidding documents and internet research. As described below, the DIR also found indicators that the Agrawal family businesses did engage in collusive practices, including submitting non-competitive bids to create the appearance of competing against each other.

### *1. Superior and GSW Were Associated and Exhibited Indicators of Collusion*

As shown in Figure 10, the DIR found documentary evidence of the association between Superior and GSW, which included the following:

- GSW and Superior's bid cover letters both stated the same telephone number (3915178).<sup>129</sup>
- GSW and Superior's bid cover letters stated addresses that are neighboring buildings on a *cul-de-sac*: GSW's head office was listed at 15, Shri Ram Road, Civil Lines, Delhi, 110054, and Superior's administrative office was listed at 21, Sri Ram Road, Civil Lines, Delhi.<sup>130</sup>
- A HAL prospectus listed Sanjeev Agrawal as both a director of GSW and the proprietor of Superior Fabrics, Kanpur.<sup>131</sup>
- Sanjeev Agrawal, GSW's executive director, and Sudhir Agrawal, Superior's executive director, were both co-defendants in a civil action filed by the Additional Director General of Central Excise, Ghaziabad, seeking payment of INR 9,074,000 in unpaid duties on the clearance of mosquito

<sup>127</sup> Sudhir Agrawal Apr. 2007 interview.

<sup>128</sup> Sudhir Agrawal Apr. 2007 interview.

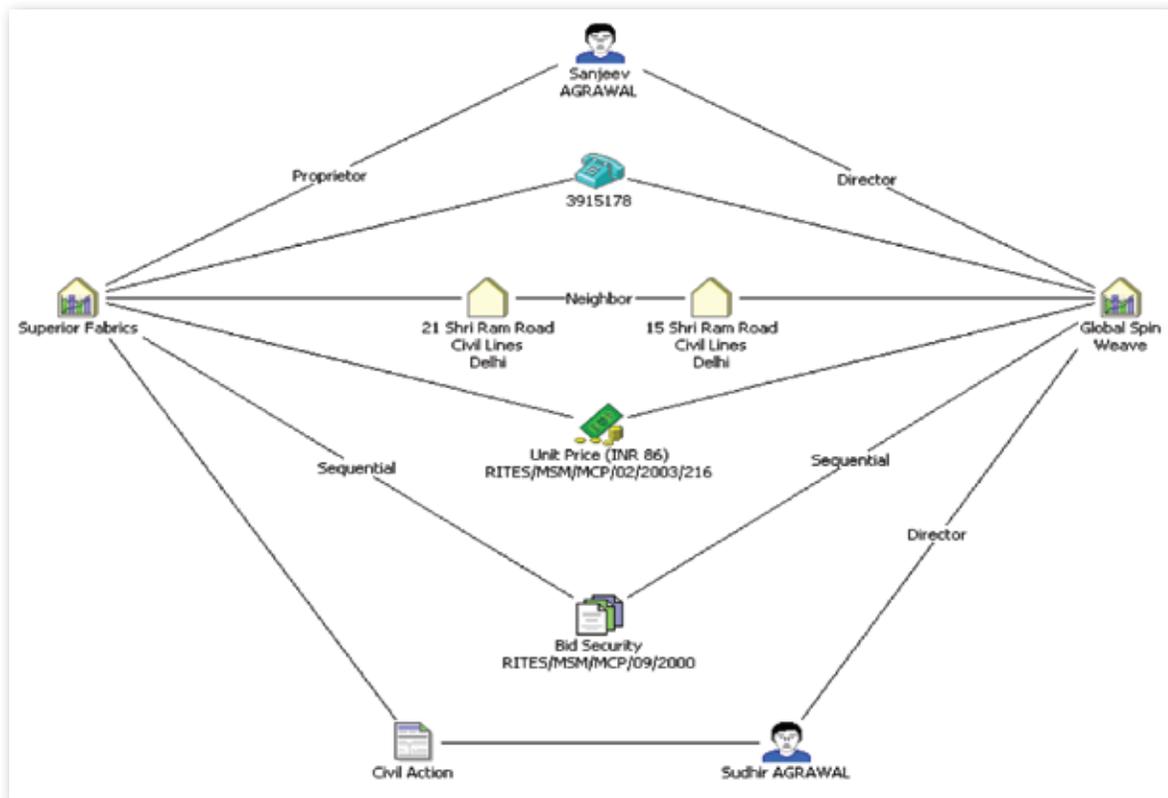
<sup>129</sup> Cover Letters to Superior Fabrics' and GSW's bids for IFB No. RITES/MSM/MCP/02/2003 (May 19, 2003) (Superior and GSW Cover Letters for IFB 02/2003).

<sup>130</sup> Superior and GSW Cover Letters for IFB 02/2003.

<sup>131</sup> HAL Prospectus, p. 65.

nets between 2000 and 2002.<sup>132</sup> Their status as co-defendants indicates that the two men share common business interests.

**Figure 10. Multiple Connections between Superior Fabrics and Global Spin Weave**



Source: Based on documents detailed in text.

Documentary indicators of collusive practices included:

- Superior and GSW quoted the same unit price (INR 86) in their fourth-tender bids for contract RITES/MSM/MCP/02/2003/216.<sup>133</sup>
- For contracts 217, 224, and 226 of the fourth tender, GSW's quoted unit price (INR 86.25) was consistently only INR 0.25 higher than Superior's (INR 86).<sup>134</sup>

<sup>132</sup> *Ibid.*

<sup>133</sup> Brief Note for the Meeting of Purchase Advisory Committee to be Held for Procurement of Mosquito Bed Nets under World Bank Financed Enhanced Malaria Control Project against RITES IFB No. RITES/MSM/MCP/02/2003.

<sup>134</sup> *Ibid.*

Under the first tender, Superior and GSW submitted sequentially numbered bid securities from Punjab National Bank, which indicates that they obtained the securities at the same time, and likely the same person acting on behalf of both companies.<sup>135</sup>

## 2. *Superior and EMCO Were Associated and Exhibited Indicators of Collusion*

As shown in Figure 11, the DIR found documentary evidence of an association between Superior and EMCO, which included the following:

- Superior and EMCO's bid cover letters stated the same address for both firms: 16/71 Civil Lines, Kanpur (U.P) 208001.<sup>136</sup>
- A HAL prospectus stated that the proprietors of Superior and EMCO are brothers: Pradeep Agrawal (EMCO) and Sanjeev Agrawal (Superior) are the sons of Prabha and the late M.M. Agrawal, a now-deceased Member of Parliament.<sup>137</sup>
- Prabha Agrawal's name was listed on the nameplate for the building at EMCO's stated address (25 Bazar Lane, Bengali Market, New Delhi) and the building at Superior's stated address (21, Sri Ram Road, Civil Lines, Delhi 110054).<sup>138</sup>
- At various points throughout the tendering process for bed nets, EMCO and Superior both listed the same address—25 Bazar Lane, Bengali Market, New Delhi—as their place of business.<sup>139</sup>

<sup>135</sup> Bid Evaluation Committee Cover Letters from RITES to Superior and GSW (Nov. 6, 2000). The sequential bid security numbers were 63-2000 and 64-2000; their date and financial institution was not provided. *Id.*

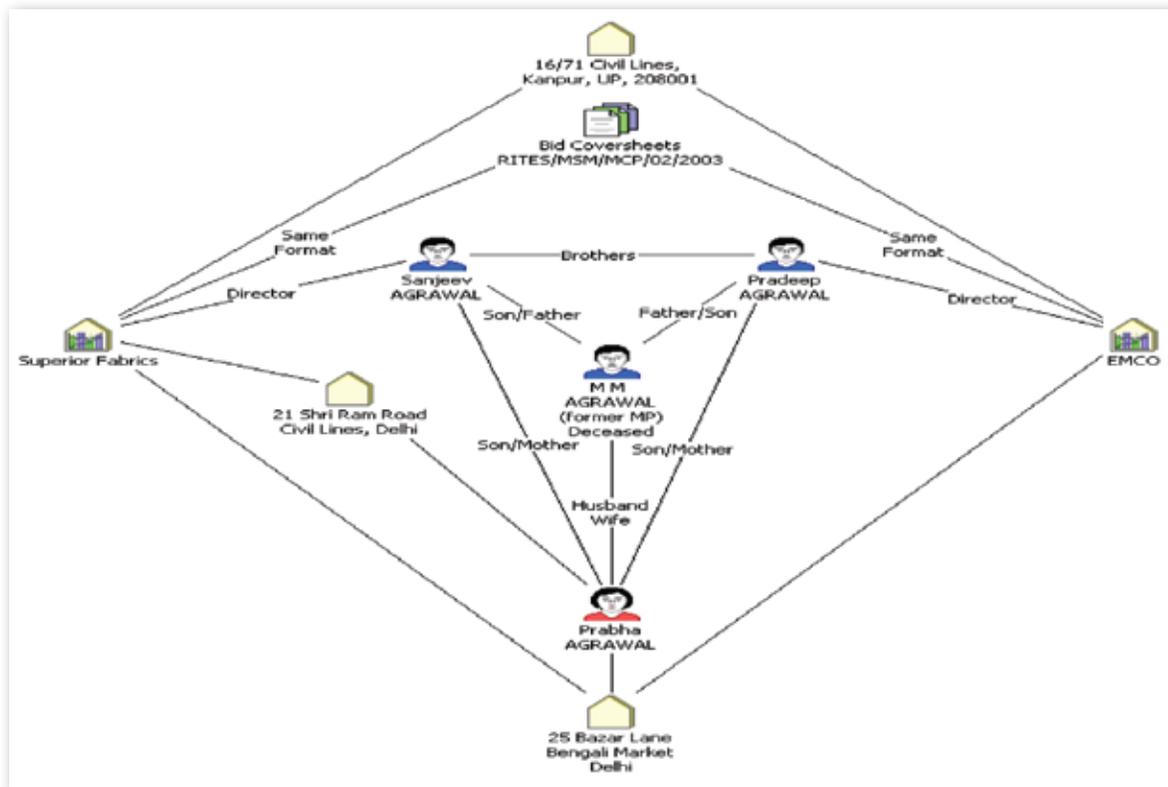
<sup>136</sup> Superior and GSW Cover Letters for IFB 02/2003.

<sup>137</sup> HAL Prospectus, pp. 40 and 46; R. Gupta. Add'l General Manager, RITES, letter to World Bank Operations Advisor (Sept. 29, 2003).

<sup>138</sup> EMCO and Superior Bid Cover Letters for RITES/MSM/MCP/02/2003.

<sup>139</sup> This commonality was discovered by queries in the DIR database populated by RITES procurement information.

**Figure 11. Multiple Connections between Superior Fabrics and EMCO**



Source: Based on documents detailed in text.

Documentary indicators of collusive practices between EMCO and Superior in bidding on bed nets tenders included bid cover letters for RITES/MCP/02/2003 with identical dates (May 19, 2003) and identical formats. The two associated companies also filed sequentially numbered bid securities from the same bank dated the same day with their bids.<sup>140</sup>

### 3. EMCO and GSW Exhibited Indicators of Collusion

Under the fifth tender, EMCO and GSW submitted bids for different lots and their bid prices were identical unit prices of INR 91 per bed net.<sup>141</sup> Each won one of five contracts in the tender.

<sup>140</sup> Bid Cover Letters from EMCO and Superior. The sequentially numbered bid securities were issued on May 19, 2003, with numbers 45/2003 and 46/2003. *Ibid.*

<sup>141</sup> Brief Note for PAC for Procurement of 38 lakhs Mosquito Bed nets against IFB No. RITES/MSM/MCP/08/2004 Opened on 17.11.2004, p. 18 (undated).

#### 4. *Complaints against the Agrawal Companies Surged during the Final Tender for Bed Nets under the MCP*

Of the 21 complaints the Bank received regarding the bed net procurement, 62 percent (13 complaints) involved the fifth tender for bed nets. The Agrawal Companies, which ultimately won 54 percent of the value of the fifth tender, were the subject of five of these complaints. Complainants made the following allegations against the Agrawal family businesses:

- “On the other hand [the Agrawal family-owned businesses] who are quoting rates in a cartel or even high rates in some cases, are given the orders, which is ... encouraging cartel formation....”<sup>142</sup>
- Due to the presence of GSW and EMCO, Vestergaard, Chemical International, Argas Consultancy, and B.R. & Sons, “genuine manufacturers are not taking part in the IFB [fifth tender].”<sup>143</sup>
- GSW submitted fictitious and forged performance certificates.<sup>144</sup>
- EMCO submitted false performance certificates and a “false client certificate on [B.R. & Sons] letter” in support of its fourth tender bid package.<sup>145</sup>
- EMCO, GSW, Argas, B.R. & Sons, Vestergaard, and Chemical International, which were supplying bed nets, were “not at all eligible ... on the basis of bunch of false and fabricated documents.”<sup>146</sup>

By contrast, and consistent with possibly collusive practices, none of the Agrawal Companies submitted complaints against each another.

<sup>142</sup> Sunil Industries letter to Shri R.K. Rao, Chairman, RITES Ltd., *et al.*, re: IFB No. RITES/MSM/MCP/09/2005 opened on 18/07-2006 for procurement of Mosquito Bed nets, under Enhanced Vector Borne Disease Control Project (Jul. 8, 2006).

<sup>143</sup> V. Kumar letter to Senior Procurement Consultant, World Bank, re: Irregularities in procurement of Mosquito Bed nets - 38 lakh pieces under Malaria Control Project under World Bank Funding, Ref: IFB No. RITES/MSM/MCP/08/2004, opened on 17.11.2004, floated by RITES Limited, MSM Division, Gurgaon (Haryana), (Mar. 19, 2005).

<sup>144</sup> R. Dubey letter to P.K. Hota, Secretary, Dept. of Health & Family Welfare (May 30, 2005). INT received this complaint but, because of limited time and resources, decided to review the issue as part of the DIR rather than launch an independent investigation. This complaint was consistent with INT’s finding that GSW had submitted fictitious performance certificates under the RCH project. INT investigation report on the RCH Project (hereafter the RCH Report), pp. 41–43.

<sup>145</sup> B.R. & Sons letter to Dr. S.P. Agrawal, Director General Health Services, Ministry of Health & Family Welfare, re: Submission of false performance by M/s EMCO Enterprises against IFB No. RITES/MSM/MCP/02/2003 opened on 20/05/2003 & IFB No. RITES/MSM/MCP/08/204 opened on 17/11/2004 for procurement of Mosquito Bed nets (May 12, 2005). The complainant, competing bidder B.R. & Sons, had submitted a performance certificate on behalf of EMCO.

<sup>146</sup> Small Mosquito Net Manufacturer’s Association letter to Senior Procurement Consultant, World Bank, re: Malaria Control Project (Credit No. 2964-IN), Ref: IFB No. RITES/MSM/MCP/08/2004, opened on 17/11/2004 for Procurement of 38 lakh pieces of Mosquito Bed nets.

## **B. The Agrawal Companies May Have Received Collusive Support from Two Additional Competing Bidders**

As noted above, three of the complaints made against the Agrawal family businesses alleged that other bidders were colluding with the Agrawal companies. The DIR found corroborating indicators that at least two companies—B.R. & Sons and R.S. Industries—behaved in a manner indicating possible collusion with the Agrawal Companies.

During the fourth tender, B.R. & Sons and R.S. Industries submitted competing bids against EMCO and GSW and other Agrawal family businesses. There are indicators that the bids were submitted merely as supporting bids to the Agrawal businesses so as to create the illusion of competitive bidding. B.R. & Sons' and R.S. Industries' bid prices for this tender were about 16 percent higher than the prices of the Agrawal Companies.<sup>147</sup> Yet the two companies apparently aided EMCO's and GSW's bid efforts by submitting performance certificates on their behalf.<sup>148</sup>

The DIR also identified two other bed net tenders exhibiting indicators that B.R. & Sons and R.S. Industries coordinated with each other: the firms submitted sequentially numbered bid securities from the same bank in the first and third tenders.<sup>149</sup>

## **C. The Number of Bidders per Contract Progressively Decreased over the History of the MCP Bed Net Tenders**

Over the five MCP bed net tenders, the number of companies submitting bids for contracts progressively decreased, which is a possible indicator of increasing inappropriate barriers to entry for competitors. As shown in Figure 12, the number of bidders per contract fell from a high of 18 for the first tender in 2000 to between only four to five bidders for the final tender.<sup>150</sup> The situation may have been aggravated by the fact that all four Agrawal-owned businesses competed in some capacity in the final tender.<sup>151</sup>

<sup>147</sup> Unit prices taken from RITES procurement documents for IFB No. RITES/MSM/MCP/02/2003.

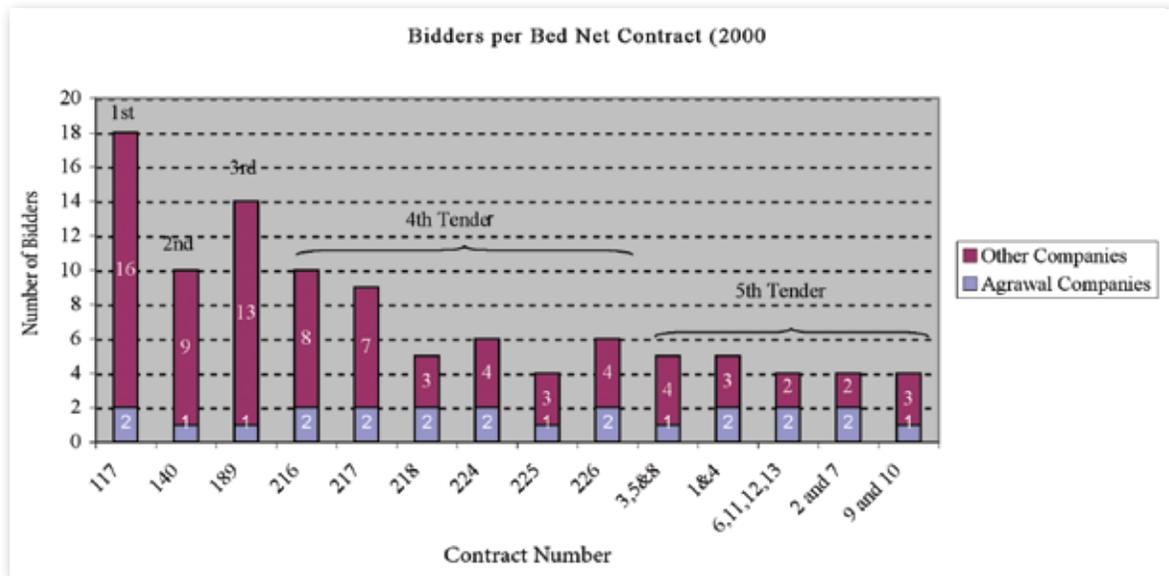
<sup>148</sup> R.S. Industries letter to GSW (Apr. 6, 2003); B.R. & Sons letter to EMCO (Apr. 15, 2003). Noteworthy is that in the fifth tender, B.R. & Sons complained about the validity of its own performance certificate to EMCO, and RITES' procurement data stated that the two companies' prices—B.R. & Sons and R.S. Industries—dipped to .01 percent below the price of the Agrawal Companies. This may indicate a shift in the firms' strategy *vis-à-vis* the Agrawal family companies.

<sup>149</sup> RITES letter to R.S. Industries (Nov. 6, 2000); RITES letter to B.R. & Sons (Nov. 6, 2000).

<sup>150</sup> BER of IFB No. RITES/MSM/MCP/09/2000 Opened on 29.8.2000 for Supply of Mosquito Bed Nets.

<sup>151</sup> HAL competed with GSW for Schedules I and IV, and with EMCO for Schedules VI, XI, XII, and XIII. Brief Note for PAC for Procurement of 38 lakhs Mosquito Bed nets against IFB No. RITES/MSM/MCP/08/2004 Opened on 17.11.2004; BER of IFB No. RITES/MSM/MCP/08/2004 Opened on 17.11.2004 for Supply of Mosquito Bed nets. GSW competed with Superior for Schedules II and VII. Brief Note for PAC for Procurement of 38 Lakhs Mosquito Bed nets against IFB No. RITES/MSM/MCP/08/2004 Opened on 17.11.2004; BER of IFB No.

**Figure 12. Number of Bidders per Bed Net Contract/Tender, 2000–2004**



Source: RITES procurement data.

#### **D. Bidders Competing against the Agrawal Companies Exhibited Independent Indicators of Corrupt and Fraudulent Practices**

The DIR found indicators that the other major bed net contract bidders independently engaged in corrupt or fraudulent practices. After the Agrawal Companies, the two recipients of the most bed net contracts were Vestergaard, which won 26 percent of the total value of MCP bed net contracts, and Chemicals International, which won 12 percent of these contracts' total value. RITES and the Government of India found that both firms had submitted either fraudulent or likely fraudulent bid documents related to these tenders.

In eight complaints filed against Vestergaard, the complainants alleged that Vestergaard engaged in fraudulent or corrupt practices. The complaints were as follows:

- Vestergaard: (1) supplied nets under a contract from the third tender that did not comply with the technical specifications for weight and height; and (2) falsely stated that it owned the Ming Khai Textile Company when, in fact, the firm was owned by the Government of Vietnam.<sup>152</sup> (The owner-

RITES/MSM/MCP/08/2004 Opened on 17.11.2004 for Supply of Mosquito Bed nets.

<sup>152</sup> Organization for Social Change and Rural Development letter to Secretary, Ministry of Health and Family

ship allegation is significant because Vestergaard won its contracts on the grounds that the bed nets were sourced from an Indian firm.)<sup>153</sup> The Ministry of Health and Family Welfare and RITES investigated the complaint and found that Vestergaard had indeed “supplied the bed nets which were not of Indian Origin,” and cancelled Vestergaard’s contracts under this tender.<sup>154</sup>

- Because of Vestergaard’s and other firms’ involvement in the tenders, “genuine manufacturers [were] not participating” in the fifth tender.<sup>155</sup>
- Vestergaard, among others, was “not eligible primarily because of false performance.”<sup>156</sup>
- Vestergaard submitted fictitious and forged performance certificates.<sup>157</sup>
- Four complaints alleged that Vestergaard erroneously received a 15 percent price preference for being a domestic manufacturer under the fifth tender when, in fact, it imported bed nets from China and Taiwan.<sup>158</sup>

Two complaints were made against Chemicals International alleging that the company submitted fictitious and forged performance certificates.<sup>159</sup> It was subsequently concluded:

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Welfare, re: RITES/MSM/MCP/09/2002/189 (third tender) (Jul. 22, 2003). INT did not receive a copy of this complaint.

<sup>153</sup> Brief for the Meeting to be Held on 12/12/2005 with Secretary, Ministry of Health and Family Welfare.

<sup>154</sup> *Ibid.*, K.K. Gupta, Under Secretary to the Government of India, letter to World Bank Operations Adviser (Mar. 24, 2006).

<sup>155</sup> V. Kumar letter to Senior Procurement Consultant, World Bank, re: “Irregularities in procurement of Mosquito Bed nets - 38 lakh pieces under Malaria Control Project under World Bank Funding, Ref: IFB No. RITES/MSM/MCP/08/2004, opened on 17.11.2004, floated by RITES Limited, MSM Division, Gurgaon (Haryana)” (Mar. 19, 2005).

<sup>156</sup> Small Mosquito Net Manufacturer’s Association letter to Senior Procurement Consultant, World Bank, re: “Malaria Control Project (Credit No. 2964-IN), Ref: IFB No. RITES/MSM/MCP/08/2004, opened on 17/11/2004 for Procurement of 38 lakh pieces of Mosquito Bed nets.”

<sup>157</sup> S. Kumar letter to S.P. Agrawal, Director, General Health Services, Ministry of Health and Family Welfare, re: “Submission of false performance by M/s Vestergaard Frandsen India Pvt. Ltd. against IFB No. RITES/MSM/MCP/08/2004 for the supply of Mosquito Bed Nets opened on 17.11.2004” (Jun. 7, 2005). The complaint was forwarded to INT for review, but at the time was determined to be of low priority and was not subsequently investigated.

<sup>158</sup> R. Prasad Verma letter to Supreme Court, New Delhi, *et al.*, re: “Fraud against Public/Government of India by M/s Vestergaard Frandsen India Pvt. Ltd., New Delhi in supply of Mosquito bed nets under World Bank aided Malaria Control Project through RITES in the year 2005” (Sept. 15, 2005); R. Dubey letter to P.K. Hota, Secretary, Dept. of Health, Ministry of Health & Family Welfare, re: “Purchase of Mosquito Bed nets by RITES Ltd. on behalf of Ministry of Health & Family Welfare, Govt. of India Under Malaria Control Project” (Sept. 19, 2005); A.K. Basu letter to R. Benmessaoud, World Bank Operations Advisor, re: “Beware: Scam by M/s Vestergaard Frandsen India Pvt. Ltd., New Delhi & RITES, cheating to Govt. of India in supply of Mosquito bed nets under World Bank funded Malaria Control Project” (Sept. 21, 2005); A. Upadhyaya letter to A. Singhal, General Manager, RITES re: “IFB No. RITES/MSM/MCP/08/2004 opened on dated 17.11.2004 for supply of Mosquito Nets, Gross misrepresentation of facts and misuse of CDEC by M/s Vestergaard Frandsen Indian (P) Ltd.” (Sept. 26, 2005).

<sup>159</sup> M. Patni letter to Additional General Manager, RITES, re: “Submission of fictitious documents/Information by M/s Chemical International in IFB No. RITES/MSM/MCP/08/2004 opened on 17/11/2004 for Procurement

in [a] legal opinion that the information furnished by the firm [was] incorrect/doubtful in certain situations and definitely require[d] explanation. It has been further advised to issue Show Cause Notice as to why their contract should be not cancelled in view of incorrect/false/doubtful information. Accordingly recommendation was sent to Director Project vide No. RITES/MSM/MCP/08/2004 dt 28.10.2005 that order of M/s Chemical International be cancelled after giving a Show Cause Notice.<sup>160</sup>

## E. Other Indicators

In reviewing the first tender for bed nets (RITES IFB NO. RITES/MSM/MCP/09/2000), the DIR found that nine of the 18 bids submitted exhibited unusual or suspicious indicators. For example, two groups of companies—Bansal Industries and Srijee Udyog, and Nath Chemicals and Super Standard Tools & Equipment—submitted bids with identical unit prices, which is an indicator of collusion given the disparity in firms' cost structures, *i.e.*, variable and fixed costs.

Moreover, reviewing the bidding documents DIR found correspondence from RITES to Superior, GSW, R.S. Industries, and B.R. & Sons indicating that Superior and GSW together and R.S. Industries and B.R. & Sons together submitted sequentially numbered bid securities. This also is an indicator of collusion.<sup>161</sup> Similarly, it appears as though both R.S. Industries and B.R. & Sons submitted sequentially numbered bid securities from Punjab & Sind Bank.<sup>162</sup>

In addition, in a letter from RITES to the World Bank's operation adviser in New Delhi, RITES informs the World Bank that the lowest responsive bidder, Fanny Pharmaceuticals, misrepresented facts regarding its manufacturing capacity in order to influence the procurement process.<sup>163</sup>

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of Mosquito Nets - 30 lac pcs" (Jun. 14, 2005); S. Kapoor letter to P. Hota, Secretary, Department of Health, Ministry of Health & Family Welfare, re: "IFB No. RITES/MSM/MCP/08/2004 opened on 17.11.2004 for purchase of Mosquito Bed nets - 38 lac pieces, Reg: Award of contract to M/s Chemical International Ltd., New Delhi on the basis of false and fictitious performance" (Apr. 6, 2006).

<sup>160</sup> Brief for the Meeting to be Held on 12/12/2005 with Secretary, Ministry of Health and Family Welfare.

<sup>161</sup> GSW's bid security number from Punjab National Bank was 63/2000 and Superior Fabrics' bid security number was 64/2000. Correspondence from Rites to GSW Ltd. dated Nov. 6, 2000 and correspondence from Rites to Superior Fabrics dated Nov. 6, 2000.

<sup>162</sup> The bid securities are sequentially numbered 10/2000 and 11/2000. Correspondence from Rites to R.S. Industries. dated Nov. 6, 2000, and Correspondence from Rites to B.R. & Sons dated Nov. 6, 2000.

<sup>163</sup> Correspondence from Rajneesh Gupta of Rites to the World Bank's Operations Adviser dated Nov. 2, 2000, to the attention to Mam Chand. Based on their findings after a field visit to Fanny's Pharmaceutical facilities, RITES declared the company non responsive and wrote the letter cited in reference

## F. The Quality of EMCO's Bed Nets Is Contested

In accordance with its methodology, the DIR reviewed a selection of bed net contracts financed under the MCP. The DIR selected for its review two bed net contracts awarded to EMCO, the winner of the largest and seventh largest bed net contracts. The two contracts reviewed included the bed nets supplied by EMCO under a contract awarded in the fourth tender to the DMO in Mayurbhanj, Orissa, and bed nets supplied by EMCO under a contract awarded in the fifth tender delivered to the Orissa consignees in Cuttack, Mayurbhanj, Dhenkanal, and Bhubaneswar.<sup>164</sup> Emco was a member of the Agrawal Companies.<sup>165</sup> The DIR's review found several indicators of poor quality bed nets:

- The DMO in Mayurbhanj provided the DIR with two final acceptance certificates that stated that EMCO's bed nets were of "inferior quality" and not packed in a "proper manner."<sup>166</sup>
- Dr. D.N. Sarangi of the Cuttack DMO said that overall, the EMCO bed nets were of bad quality, would tear easily, and were not as large as specified (providing room for only one-and-a-half people, instead of two). Dr. Sarangi also reported that the DMO had received 375 damaged (not just inferior) bed nets. Dr. Sarangi added that the DMO had complained verbally to the Vector Borne Disease Control Program Coordinator about the nets, but had not complained in writing to RITES or the supplier. The DMO repaired the bed nets by sewing them.
- In Mayurbhanj, the DMO showed the DIR a group of 75 defective bed nets that were packed and ready to be shipped back to EMCO. The DMO added that EMCO had delivered these bed nets on April 3, 2006, more than one year after the contract signing.<sup>167</sup>
- In February 2005, Utkal Women Activists' Forum complained to the Bank's Delhi procurement hub of "very poor quality mosquito bed nets supplied with holes much bigger than specifications and a large number have been supplied in damaged and torn condition."<sup>168</sup>

<sup>164</sup> EMCO's contract under the fifth tender comprised 80 percent of EMCO's income from MCP bed net contracts.

<sup>165</sup> EMCO won 28 percent of the total value of the MCP's bed net contracts. Vestergaard won 26 percent of their value, GSW won 16 percent, and Chemicals International won 12 percent.

<sup>166</sup> Goods Acceptance Certificate, signed by Dr. K.C. Mohanty (Jul. 26, 2004); Goods Acceptance Certificate, signed by Dr. K.C. Mohanty (Aug. 2, 2004).

<sup>167</sup> Final Acceptance Certificate (Apr. 3, 2006).

<sup>168</sup> Letter dated February 8, 2005 from a Programme Officer at Utkal Women Activists' Forum. INT has no record of the complaint prior to the DIR, but nevertheless attempted to contact the complainant (located in Orissa)

In addition, as described earlier, a contract awarded to Superior Fabrics was cancelled due to the supply of poor quality bed nets.

## Pharmaceuticals

Pharmaceuticals procured under the MCP consisted of chloroquine phosphate tablets, combi-blister packs, and DEC tablets.<sup>169</sup> Nine contracts worth USD 4.3 million were awarded for the supply of chloroquine across four tenders. Twelve contracts worth USD 4.1 million were awarded for the supply of DEC tablets across five tenders. And five contracts worth USD 1.3 million were awarded for combi-blister packs (chloroquine and primaquine) across two tenders.<sup>170</sup>

The DIR found that two firms recently debarred by the Bank for collusive practices on the RCH Project—Pure Pharma Limited (Pure Pharma) and Nestor Pharmaceuticals Limited (Nestor)—were awarded the majority of the pharmaceutical contracts. In terms of value, Pure Pharma won 62 percent of the DEC tablets contracts, and Nestor and Pure Pharma combined won 93 percent and 73 percent of the chloroquine and combi-blister packs contracts, respectively. Due to the allegations surrounding the collusive bidding practices of Pure Pharma and Nestor on the RCH Project, the DIR focused its review of pharmaceutical procurements on the tenders involving these two companies.<sup>171</sup>

The DIR found indicators of collusive behavior between Nestor and Pure Pharma—such as symmetrical pricing—in all four chloroquine phosphate tenders and one combi-blister pack tender. The types of indicators were similar to these com-

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for a follow-up interview in April 2007, but was unsuccessful.

<sup>169</sup> Chloroquine phosphate is a common treatment for malaria. Combi-blister packs contain a combination of drugs—usually either chloroquine and primaquine, or chloroquine and artesunate. DEC tablets are used to treat the vector-borne disease filariasis.

<sup>170</sup> These figures are based on the procurement documents that RITES provided to the DIR.

<sup>171</sup> The DIR also reviewed four MCP tenders worth USD 2.3 million for the procurement of arteether injections, which are a second-line drug used to treat severe cases of chloroquine-resistant malaria. All four contracts were awarded to one company—Themis Chemicals/Medicare Ltd. (Themis). The DIR identified the following related to these contracts: (1) Competition for the contracts was limited; the number of bidders for each contract ranged from one to three, while the number of interested bidders purchasing bid documents ranged from three to six; (2) Themis was connected to its competition in ways that potentially undermined the tenders' competitiveness: Ipca tested Themis' arteether, and Norris Medicines, Ltd. manufactured Themis' arteether; A.K. Jain, Executive Director, Ipca Laboratories Ltd., letter to B.K. Mandal, Director, Central Drugs Laboratory, Government of India (Oct. 18, 1999); Arvind Gandhi, Themis Medicare, letter to The Commissioner, Food and Drugs Control Administration, Government of India; and (3) RITES consistently disqualified Themis' lower-priced competitors for violations of the tenders' technical specifications and/or qualification criteria; two companies (ACE Pharmaceuticals BV by mail to Mr. Armando Araujo, Dir. OPCS by letter on October 26, 2004 and Skymax to the World Bank Office Delhi and the Investigations Hotline by e-mail on February 8, 2005) complained that they were disqualified or could not compete because of too stringent qualification criteria. Based on the documentation available, the DIR was not able to determine the outcome of such complaints reviewed by both the Bank and RITES, except for the fact that Themis Chemical won all contracts.

panies' collusive practices on RCH and were occurring during the same general time period.<sup>172</sup> The DIR also found indicators of anticompetitive bidding practices in the procurement of DEC tablets. Lastly, correspondence and reports from project officials indicate that there were concerns about the quality of the DEC tablets provided under MCP.

#### **A. The Pharmaceutical Contracts**

Table 12 shows the pharmaceutical contracts awarded under the MCP:

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<sup>172</sup> RCH Report, pp.21–41.

**Table 12. Pharmaceutical Contracts Awarded under the MCP**

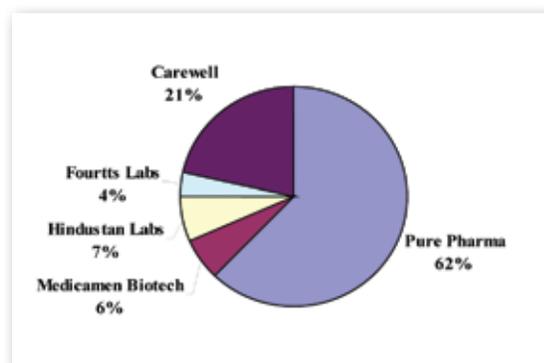
Date	Contract Number	Supplier	Contract Amount (USD)
<b>Chloroquine</b>			
Sept. 17, 2001	RITES/MSM/MCP/01/2001/151	Nestor Pharmaceuticals Limited	230,055
Jan. 2, 2004	RITES/MSM/MCP/05/2003/220	Nestor Pharmaceuticals Limited	1,182,184
Jan. 7, 2004	RITES/MSM/MCP/05/2003/221	Pure Pharma Limited	620,565
Mar. 21, 2005	RITES/MSM/MCP/05/2004/244	Pure Pharma Limited	387,231
Mar. 22, 2005	RITES/MSM/MCP/05/2004/243	Nestor Pharmaceuticals Limited	563,080
Apr. 15, 2005	RITES/MSM/MCP/15/2004/266	Pure Pharma Limited	505,699
Apr. 19, 2005	RITES/MSM/MCP/15/2004/267	Legend Drugs & Formulation Private Limited	226,905
Apr. 19, 2005	RITES/MSM/MCP/15/2004/265	Nestor Pharmaceuticals Limited	455,892
May 1, 2005	RITES/MSM/MCP/05/2004/242	Fourrts (India) Laboratories Pvt. Ltd.	104,227
		<b>Total</b>	<b>4,275,838</b>
<b>Combi-blister</b>			
Apr. 22, 2003	Rites/MSM/MCP/01/2003: Schedules IV and VII	Endolabs Ltd.	113,449
Apr. 22, 2003	Rites/MSM/MCP/01/2003: Schedules I and VI	Hindustan Laboratories	52,654
Apr. 22, 2003	Rites/MSM/MCP/01/2003: Schedules II, III, V, and VIII	Zest Pharma	173,092
Mar. 1, 2005	RITES/MSM/MCP/02/2004/246: Schedules I, II, V–VIII	Nestor Pharmaceuticals Limited	638,449
Mar. 1, 2005	RITES/MSM/MCP/02/2004/247: Schedules III and IV	Pure Pharma Limited	282,914
		<b>Total</b>	<b>1,260,558</b>
<b>DEC Tablets</b>			
Oct. 9, 2001	MCP/02/2001/155	Carewell Phaarma	243,852
Oct. 31, 2001	MCP/02/2001/146	Carewell Phaarma	102,418
Nov. 11, 2002	MCP/08/2002/185	Carewell Phaarma	316,116
Jan. 25, 2003	MCP/08/2002/188	Carewell Phaarma	93,926
Jan. 7, 2004	MCP/04/2003/219	Pure Pharma Limited	322,572
May 11, 2004	MCP/01/2004/236	Hindustan Laboratories	276,666
May 15, 2004	MCP/01/2004/235	Pure Pharma Limited	1,272,772
Mar. 24, 2005	MCP/14/2004/262	Medicamen Biotech Limited	249,839
Apr. 5, 2005	MCP/14/2004/261	Carewell Phaarma	118,957
Apr. 5, 2005	MCP/14/2004/260	Fourrts (India) Laboratories Pvt. Ltd.	150,171
Apr. 9, 2005	MCP/14/2004/259	Pure Pharma Limited	635,178
Apr. 15, 2005	MCP/14/2004/264	Pure Pharma Limited	320,539
		<b>Total</b>	<b>4,103,006</b>

Source: RITES procurement data.

## B. Concentration of Contract Awards among Limited Winners

Pure Pharma and Carewell Pharma, Ltd. (Carewell) dominated the award of MCP DEC contracts (Figure 13). Pure Pharma won 33 percent of the total number of DEC contracts representing USD 2.5 million, or 62 percent of total contract value. Carewell won 42 percent of the total number of DEC contracts representing USD 0.88 million, or 21 percent of total contract value. The concentration of award winners is even more prevalent for all DEC tenders prior to 2004. For those, all of the contracts were won by either Pure Pharma (30 percent of total value) or Carewell (70 percent of total value). Another supplier did not win a contract until the 2004 tender, although only in small amounts beginning with that tender. Pure Pharma won 70 percent of the value of the remaining tenders.

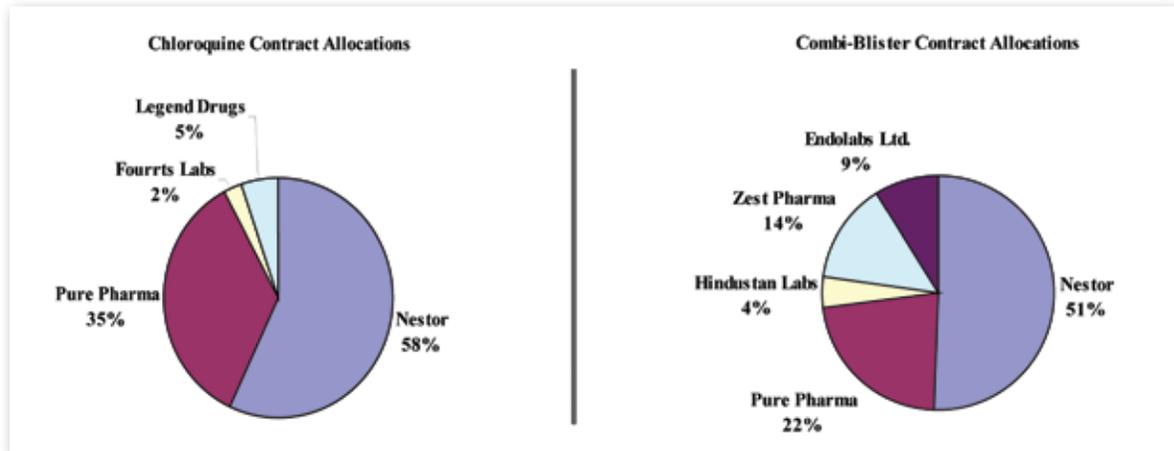
**Figure 13. Firms Receiving DEC Tablet Contracts, by Total Contract Value**



Source: RITES procurement data.

Similarly, in the case of both chloroquine phosphate and combi-blister packs, Nestor and Pure Pharma dominated the award of contracts (Figures 14 and 15). Nestor won 58 percent of the chloroquine contracts and 51 percent of the combi-blister pack contracts (by value), and Pure Pharma won 35 percent of the chloroquine and 22 percent of the combi-blister pack contracts (by value). They ranked first and second in contract value for both goods:

**Figures 14 and 15. Firms Receiving Chloroquine and Combi-Blister Contracts, by Total Contract Value**



Note: RITES' procurement data stated that Nestor won INR 2,431,210 in chloroquine contracts and INR 638,449 in combi-blister contracts; Pure Pharma won INR 1,513,495 in chloroquine contracts and INR 282,914 in combi-blister contracts; Endolabs Ltd. won INR 113,449 in combi-blister contracts; Fourrts Laboratories (India) won INR 104,230 in chloroquine contracts; Hindustan Laboratories won INR 52,654 in combi-blister contracts; Legend Drugs won INR 226,905 in chloroquine contracts; and Zest Pharma won INR 173,092 in combi-blister contracts.

Source: RITES procurement data.

## C. Indicators for Chloroquine Phosphate and Combi-Blister Packs

### 1. *The Price Differential between Nestor and Pure Pharma Was Symmetrical and Rotated*

When tendering for the second combi-blister contract package, RITES/MSM/MCP/02/2004, Nestor bid a unit price INR 0.02 lower than Pure Pharma's unit price on Schedules I, II, VI, and VII.<sup>173</sup> In contrast, Pure Pharma bid a unit price INR 0.02 lower than Nestor's unit price on Schedules II and IV.<sup>174</sup> The two firms engaged in this same practice in RCH procurements.<sup>175</sup> The symmetry of their bid price differentials and the rotation of their high and low bids between schedules are both indicators of possible collusion to distribute the bid-upon contracts between the two firms (Table 13).

<sup>173</sup> BER of IFB No. RITES/MSM/MCP/02/2004. The first combi-blister package (RITES/MSM/MCP/01/2003) did not contain indicators of collusion between Nestor and Pure Pharma.

<sup>174</sup> *Ibid.*

<sup>175</sup> RCH Report, pp.21-41.

**Table 13. Nestor and Pure Pharma’s Symmetrical, Alternating Bid Prices for Combi-Blister Packs in INR per Unit**

Company	Schedule I	Schedule II	Schedule III	Schedule IV	Schedule V	Schedule VI	Schedule VII
Nestor	<b>2.68</b>	<b>2.68</b>	2.68	2.68	<b>2.68</b>	<b>2.72</b>	<b>2.74</b>
Pure Pharma	2.70	2.70	<b>2.66</b>	<b>2.66</b>	2.71	2.74	2.76
Endolabs	2.84			2.84	2.74	2.89	2.99
Jay Formulations	3.07			3.07			
Hindustan Laboratories	3.15	3.15	3.15	3.15	3.22	3.29	3.33
Medicamen		3.30			3.30		
Zest Pharma			3.10	3.13			

Note: Nestor and Pure Pharma’s bid prices are boxed in red, and the lower of the two firms’ bids are stated in bold red text.

Source: RITES procurement data.

Similarly, under the fourth tender for chloroquine phosphate, Nestor and Pure Pharma submitted bid prices that differed by only 0.8 percent.<sup>176</sup> Such similar pricing is another indicator of possible collusion by the firms.

## 2. *Nestor Won a Greater Proportion of Contracts than Pure Pharma*

Nestor won a proportion of chloroquine phosphate and combi-blister pack contracts that was almost twice as large as the proportion won by Pure Pharma. This mirrored the contract award pattern present when the two firms colluded on RCH tenders: Nestor won contracts worth USD 37.8 million, while Pure Pharma won contracts worth USD 12.7 million.<sup>177</sup> The fact that Nestor won a larger proportion of these contracts indicates that, if Nestor and Pure Pharma were colluding, Nestor likely was the leader of the collusive ring. This is consistent with: (1) the statements of a confidential RCH witness, who claimed that Nestor was the leader of the RCH collusion ring; and (2) the findings of the Bank’s Sanctions Board, which debarred Nestor for three years for collusive practices but Pure Pharma for only one year.<sup>178</sup>

<sup>176</sup> BER of IFB No. RITES/MSM/MCP/15/2004.

<sup>177</sup> RCH Report, p. 4.

<sup>178</sup> *Ibid.*, p. 22; Decision of the Sanctions Board, Sanctions Case No. 71, *In re Nestor Pharmaceuticals Ltd.*, para. 8 (Jul. 9, 2007).

### *3. Nestor and Pure Pharma Were Alleged to Have Tampered with Drugs to Undercut Competitors' Prices*

During the second combi-blister packet tender, Endolabs Limited complained to RITES that Nestor and Pure Pharma were providing low bid prices by overstating the amount of raw material they would need to import to manufacture the drugs and selling the excess raw material on the Indian domestic market without paying taxes and customs duties.<sup>179</sup> This allegation does not regard collusion by the two firms, but is a further indicator of possible fraud conducted by them.

## **D. Fraud and Corruption Indicators under DEC Contracts**

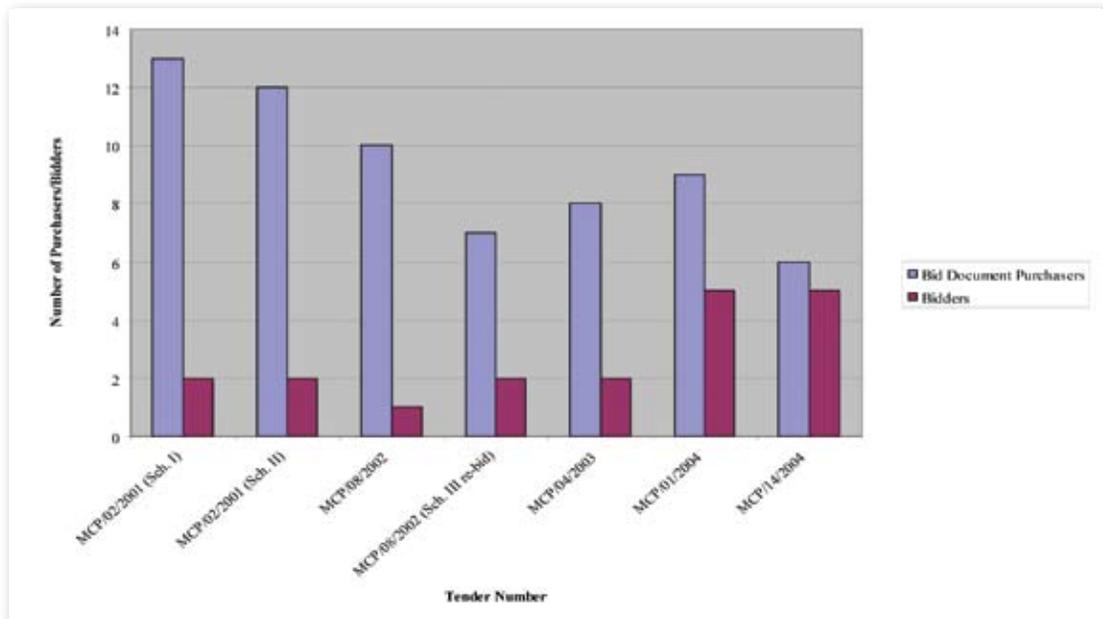
### *1. A Large Disparity Existed between the Number of Bid Purchases and Final Bidders*

With the exception of the final DEC tablet tender, the number of bidders for DEC contracts was much lower than the number of bid document purchasers. The average number of bid document purchasers across the five tenders was 8.4, but the average number of bidders that bid on at least one schedule under each tender was only 2.8. On average, two-thirds of the firms that purchased bid documents did not submit bids, and the number of bidders ranged from as low as one to as high as five (Figure 16).

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<sup>179</sup> Endolabs, Ltd. letter to Chairman, Ministry of Health and Family Welfare, re: IFB No. RITES/MSM/MCP/02/2004 Due On 17-01-2005 (Feb. 11, 2005). Endolabs stated that Nestor and Pure Pharma's Form 10s contained misrepresentations of their true raw material needs. INT received this complaint but did not investigate it because Nestor and Pure Pharma already had received Notices of Debarment from the World Bank.

**Figure 16. Comparison of Bid Document Purchasers to Bidders across Tenders**



Source: RITES procurement data.

The disparity between the number of bid purchasers and the number of bidders is most apparent under the two earliest tenders: RITES/MSM/MCP/02/2001 and RITES/MSM/MCP/08/2002.

For example, in the case of contract number RITES/MSM/MCP/02/2001/155, 12 companies purchased the bidding documents while only two companies—Carewell and Maan Pharmaceuticals—ultimately bid on the contract.<sup>180</sup> Although Maan's bid was 56 percent lower than Carewell's, RITES disqualified Maan for non-compliance with the post-qualification criteria.<sup>181</sup> In effect, RITES awarded the contract to Carewell, whose bid exceeded the contract's cost estimate by 47 percent.<sup>182</sup>

For contract number RITES/MSM/MCP/02/2001/146, 13 companies purchased the bidding documents but only two companies submitted bids: Carewell and M/s Khard Soaps (Khard).<sup>183</sup> Although Khard was disqualified for not submit-

<sup>180</sup> BER of IFB No. RITES/MSM/MCP/02/2001 Opened on 14/09/2001 for Supply of DEC Tablets, secs. 3.5 and 4.3.

<sup>181</sup> *Ibid.*, sec. 4.3. RITES determined that Maan had not supplied 80 percent of the quantity required by the contract in the last three years, nor had it submitted its Good Manufacturing Practices (GMP) certificate in the format prescribed by the World Health Organization. *Ibid.*, sec. 7.1. Under World Bank, *Guidelines: Procurement under IBRD Loans and IDA Credits* (1996), para. 2.59, the Borrower had the discretion to reject all bids and rebid on the ground of lack of effective competition.

<sup>182</sup> *Ibid.*, sec. 8.1.

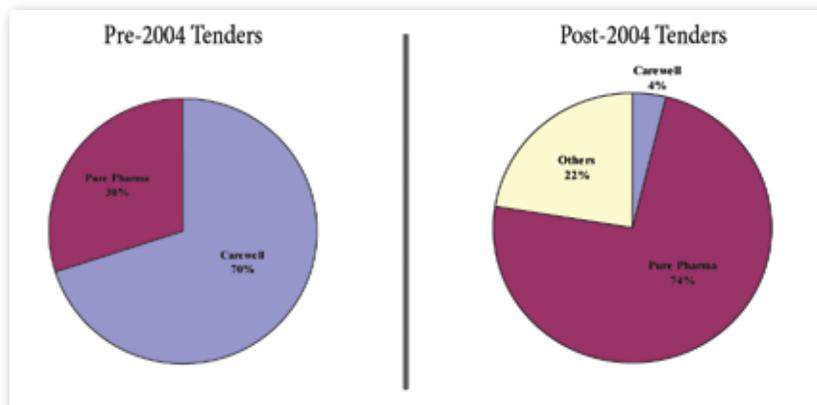
<sup>183</sup> BER of IFB No. RITES/MSM/MCP/02/2001 Opened on 17/08/2001 for Supply of DEC Tablets, sec. 3.6.

ting its bid security along with its bid, Khard would have lost to Carewell anyway because Khard's bid price was nearly triple Carewell's bid price.<sup>184</sup> RITES ultimately awarded the contract to Carewell at 23 percent above the cost estimate.<sup>185</sup>

## 2. Collusion Indicators Ceased in 2004

As in the case of pyrethroids, while Carewell and Pure Pharma dominated the 2001–2003 DEC tablet tenders. Beginning in 2004, other companies began winning contracts (Figures 17 and 18).

**Figures 17 and 18. Distribution of Contract Value on Tenders Pre- and Post-2004**



Source: RITES procurement data.

In addition, the disparity between bid documents purchased and bids submitted under tender RITES/MSM/MCP/01/2004 was not as pronounced as in previous tenders. In this tender, nine companies purchased the bidding documents and five companies ultimately submitted bids.<sup>186</sup>

Further, under this tender Carewell and Pure Pharma bid against each other on Schedules I and II and behaved like genuine competitors. Carewell's bid was substantially lower than Pure Pharma's bid for both schedules, and when RITES disqualified Carewell, Carewell petitioned India's Purchase Advisory Committee to reverse the disqualification.<sup>187</sup> This attempt to undo Pure Pharma's contract

<sup>184</sup> *Ibid.*, secs. 4.3 and 5.5.

<sup>185</sup> *Ibid.*, sec. 8.1.

<sup>186</sup> BER of IFB No. RITES/MSM/MCP/01/2004 Opened on 15/4/2004 for Supply of DEC Tablets (100 mg), secs. 3.7 and 4.3.

<sup>187</sup> *Ibid.*, secs. 4.3 and 7.0; Carewell Pharma letter to Chairman, Purchase Advisory Committee, Government of India (Apr. 24, 2004); Carewell Pharma letter to General Manager, RITES (Apr. 24, 2004). Carewell was disqualified from both tenders for failing to have completed two similar contracts in the previous five years and lacking sufficient average annual turnover.

award reflects an acute competition between the two firms and is inconsistent with a common collusive interest.

### 3. *DEC Implementation Quality Is Contested*

The DIR visited 13 locations that received DEC tablets under the five tenders, and only two locations reported quality problems with the tablets. The DIR also tested three samples of DEC tablets supplied by Pure Pharma, and none of the tests revealed any quality problems. However, the World Health Organization (WHO) received a complaint from the Nepalese government—to whom the Ministry of Health and Family Welfare had loaned a supply of DEC tablets—that the tablets were of poor quality.<sup>188</sup> Further, the Government of India's 2004–2005 audit of the MCP stated that 80 million DEC tablets provided by Pure Pharma were found to be substandard and replaced by the firm.<sup>189</sup> In addition, in two instances, local officials reported to the DIR that DEC tablet contractors supplied substandard product. It is, therefore, unclear whether the winning firms provided DEC tablets of the proper quality.

## **E. Similarities and Timing of Indicators with Collusive Activities on RCH**

The MCP collusion indicators occurred during the same years, and involved the same companies as collusion under RCH. Nestor and Pure Pharma were debarred for three years and one year, respectively, for engaging in collusive practices.<sup>190</sup> Further, a confidential witness that admitted to colluding with Nestor and Pure Pharma in a Nestor-led cartel on RCH also joined Nestor and Pure Pharma to bid for MCP pharmaceutical contracts.<sup>191</sup> Thus the same firms colluding on RCH bid on MCP tenders at the same time as their RCH collusion; this is an indicator of possible collusion on MCP contracts as well.

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<sup>188</sup> Kan Tun, representative of the World Health Organization in Nepal, facsimile to Dr. S.J. Habayeb, representative of the World Health Organization in India, dated August 16, 2006.

<sup>189</sup> Office of Director-General of Audit, 2004–2005 Audit of the Enhanced Malaria Control Project, p. 7 (Date Illegible).

<sup>190</sup> The Sanctions Board has viewed identical pricing as strong evidence of collusive behavior. Decision of the Sanctions Board, Sanctions Case No. 71, *In re Nestor Pharmaceuticals Ltd.*, para. 6 (Jul. 9, 2007).

<sup>191</sup> The witness admitted to colluding with Nestor and Pure Pharma within a narrow set of years, and not on all tenders. RCH Report, p. 22. The DIR has not interviewed the witness to discuss collusion under the MCP, so while there is a high risk that the collusion on RCH carried over to the MCP, this is presently unconfirmed.

## RITES

The DIR identified indicators of possible fraud and corruption that affected multiple ICB and NCB procurements of a range of goods that involved numerous firms. But one common element linked these procurements: RITES was the PSA in charge of administering them. To evaluate whether RITES may have engaged in fraud or corruption, the DIR looked across the range of RITES' tenders for indicators regarding RITES itself. This review identified actions by RITES, inaction by RITES, and complaints against RITES that all indicate RITES' possible support of collusive schemes affecting MCP tenders.

### A. RITES May Have Shared Pyrethroid Bid Cost Estimates with the Four Firms

A bid cost estimate is a Borrower's pre-bid estimate of how much a contract should cost; it is used to evaluate the reasonableness of firms' bid prices.<sup>192</sup> Because they show what the PSA expects a contract to cost, and therefore could affect firms' bid prices, bid cost estimates are not made public except for specific types of contracts or in a limited number of jurisdictions and with the approval of the World Bank. Based on the documentation available, the DIR did not find evidence that the Bank had authorized the release of the cost estimates for MCP.

The DIR found indicators that RITES may have informed four possibly colluding firms—Aventis, Bayer, BASF, and Zeneca—of the bid cost estimates for the pyrethroid contracts on which they were bidding. The four firms' prices were unusually close to the cost estimate, ranging from 3–6 percent below the cost estimate in the early MCP tenders. In contrast, throughout all the tenders, other bidders submitted prices either 30–54 percent below, or up to 25 percent above, the bid cost estimate. Tables 14 and 15 and Figures 19 and 20 highlight this difference in the bids for Schedules III and VI of the tender RITES/MSM/MCP/04/2002.<sup>193</sup>

<sup>192</sup> World Bank, *Guidelines: Procurement under IBRD Loans and IDA Credits*, para. 2.61, p. 28 (1996).

<sup>193</sup> This tender resulted in the award of seven contracts to bidding firms.

**Table 14. Example of Firms' Bid Price Proximity to the Cost Estimate for Tender P04/2002/191 (values in INR)**

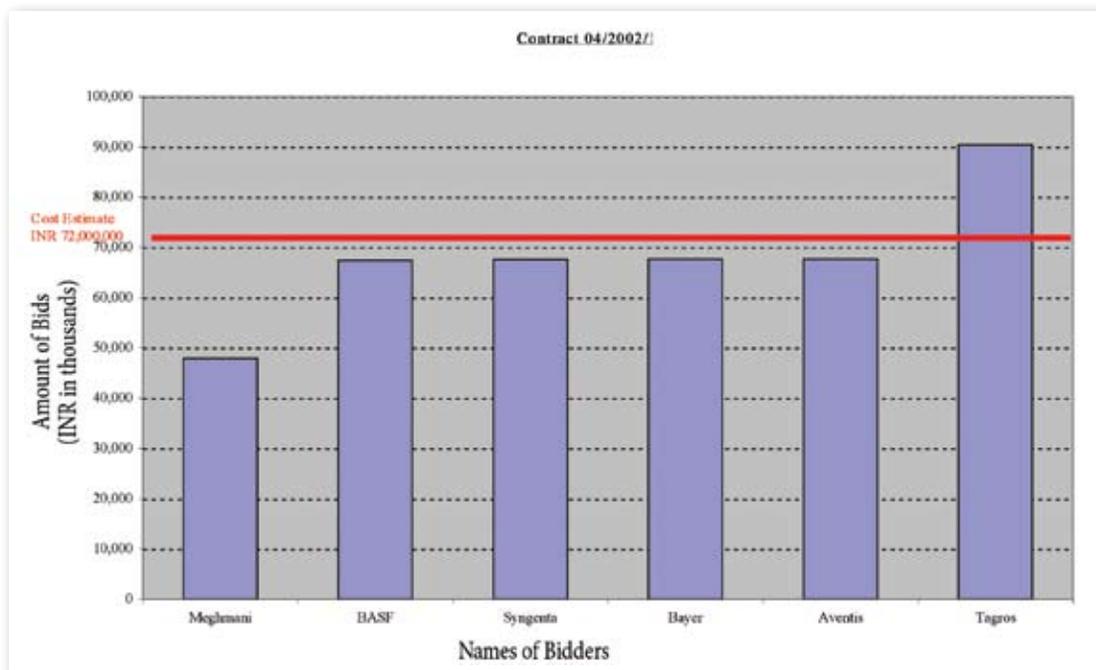
Schedule III	Contract P04/2002/191			Cost Estimate	72,000,000
Company	Offer	Variation/ Estimate	Ranking	Comparison between Bids	
Meghmani <sup>a</sup>	47,840,625	-33.55%	NR	Meghmani/BASF	-29.05%
<b>BASF</b>	<b>67,432,500</b>	<b>-6.34%</b>	<b>L1</b>	BASF/ Syngenta	-0.30%
Syngenta	67,635,000	-6.06%	L2	Syngenta/ Bayer	-0.07%
Bayer	67,685,625	-5.99%	L3	Bayer/ Aventis	-0.01%
Aventis	67,695,750	-5.98%	L4	BASF /Aventis	-0.39%
Tagros	90,389,418	25.54%	L5		

NR = non-responsive

<sup>a</sup> According to the BER for IFB No. RITES/MSM/MCP/04/2002, p 15, Meghmani was declared nonresponsive because as the result of winning Schedules I and II, it no longer met the quantity qualification criteria of 80 percent of the contract quantity to be procured under this schedule.

Note: The winning bidder is listed in bolded text, and the possibly colluding firms are boxed in red.

Source: RITES procurement data.

**Figure 19. Example of Firms' Bid Price Proximity to the Cost Estimate for Tender P04/2002/191**

Source: RITES procurement data.

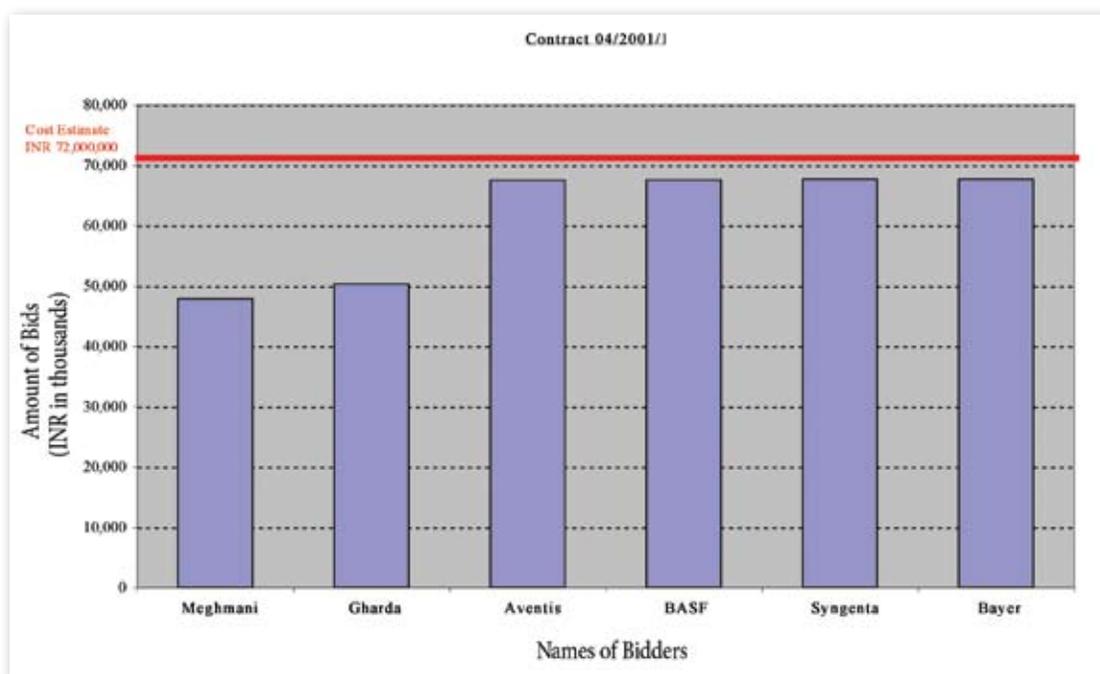
**Table 15. Example of Firms' Bid Price Proximity to the Cost Estimate for Tender P04/2002/195**

Schedule VI	Contract P04/2002/195			Cost Estimate	72,000,000
Company	Offer	Variation/ Estimate	Rank	Comparison between Bids	
Meghmani	47,840,625	-33.55%	NR	Meghmani/Aventis	-29.16%
Gharda	50,325,300	-30.10%	NR	Gharda/Aventis	-25.48%
<b>Aventis</b>	<b>67,533,750</b>	<b>-6.20%</b>	<b>L1</b>	Aventis/ BASF	-0.07%
BASF	67,584,375	-6.13%	L2	BASF/ Syngenta	-0.11%
Syngenta	67,660,312	-6.03%	L3	Syngenta/ Bayer	-0.04%
Bayer	67,685,625	-5.99%	L4	Aventis/ Bayer	-0.22%

NR = non-responsive

Note: The winning bidder is listed in bolded text, and the possibly colluding firms are boxed in red.

Source: RITES procurement data.

**Figure 20. Example of Proximity to the Cost Estimate of the Cartel Members' Quotations under Tender P04/2002 for Contract 195**

Source: RITES procurement data.

The four firms' bid prices continued to track the bid cost estimate until last two pyrethroid tenders.<sup>194</sup> Leaked bid cost estimates appear to have affected 21 of the

<sup>194</sup> These were bid packages MCP/03/2004 and MCP/04/2004, which led to the award of contracts 274, 275, 276, 277, 280, 281, and 272-73, respectively. These were smaller pyrethroid contracts that totaled INR 84,493,148 in value.

29 MCP pyrethroid contracts, representing 91 percent of the total value of pyrethroid contracts awarded under the MCP.<sup>195</sup>

In contrast, in tenders MCP/03/2004 and MCP 04/2004, when all other indicators of collusive behaviors ceased, the prices quoted by the same companies also stopped tracking bid cost estimates and varied from the estimates without an apparent pattern.

Bid cost estimates are generally known only by procurement and government officials (aside from the exceptions mentioned previously); therefore, the four firms whose bids closely tracked the bid cost estimates likely obtained the cost estimates in advance from one of these two sources. This is an indicator that RITES may have colluded with the four firms for the award of MCP pyrethroid contracts.

## **B. Complaints Allege That RITES Improperly Supported Certain Bidders**

The DIR's review of MCP complaints identified 14 complaints alleging that RITES was limiting competition for tenders by including restrictive qualification criteria in its bidding documents. For example, one complaint alleged that Vestergaard's bed net contracts as part of the third tender did not comply with the contract's weight and height specifications, and that within a day after the notification of contract award, RITES relaxed the weight specification "under full knowledge of Shri Deepak Gupta, Jt. Secy. Ministry of Health & F.W."<sup>196</sup> The complainant further alleged that RITES had tested samples of Vestergaard's bed nets, noted the discrepancies, and then suppressed the findings.<sup>197</sup> The World Bank's Acting Operations Adviser, Gus Litvak, forwarded the complaint to RITES for "necessary action."<sup>198</sup> Documents provided to the DIR do not state whether RITES acted on the complaint.

Another complaint related to the purchase of Rapid Diagnostics Kits. Rapid Diagnostic Pvt., Ltd., submitted a complaint to INT dated April 6, 2005, in which it alleged that its "bidding documents have been modified by the peoples of RITES India Limited and bid validity extension letters have been removed from [their] bid after submission, just to favor the bidder of their choice [Span Diagnostics Limited and Orchid Biomedical System]."<sup>199</sup>

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<sup>195</sup> Calculations based on RITES' procurement data.

<sup>196</sup> Organization for Social Change and Rural Development letter to Secretary, Ministry of Health and Family Welfare, re: RITES/MSM/MCP/09/2002/189 (third tender) (Jul. 22, 2003).

<sup>197</sup> *Ibid.*

<sup>198</sup> *Ibid.*

<sup>199</sup> Rapid Diagnostic Pvt. Ltd. Letter to Anti-Corruption Dept., The World Bank, *et al.*, re: "Unlawful manipulation of the tender documents in the tender invited by Ministry of Health & Family (Government of India)

In addition, a credible confidential witness to the RCH investigation alleged that a senior manager at RITES was receiving kickbacks from Bayer and Aventis, companies operating a pool system (*i.e.*, cartel) for the supply of pyrethroids. Another credible witness stated that both RITES managers and Indian government officials involved in RITES-administered procurements would accept bribes in exchange for contract awards.

### C. RITES Acted Insufficiently to Impede Apparent Collusion

The DIR reviewed the manner in which RITES managed complaints and allegations of collusive behavior under the MCP. The DIR found that RITES appeared to have taken only minimal steps to address possible collusive behavior.

#### 1. *Indicators of Collusion in Pyrethroids*

Under the pyrethroids tender RITES/MCP/MSM/04/2001, RITES and the Purchase Advisory Committee decided to split a contract between two bidders—Bayer and BASF—that submitted identical bid prices for the contract, a bidding pattern that indicates possible collusive behavior.<sup>200</sup> Nonetheless, RITES requested the Bank’s No Objection to splitting the contract between the two firms. To its credit, the Bank’s Delhi office required clarification from RITES on this issue and recommended that RITES revise its BER.<sup>201</sup>

Following the Bank’s prompting, RITES’ revised BER concluded that it was “obvious” that four bidding firms that had submitted pairs of identical bids “quoted the prices with a mutual understanding for this IFB.”<sup>202</sup> RITES’ BER stated that, prior to recommending the contract split, RITES sought explanations from the four firms for their pricing similarities and all four answered by: (1) vehemently denying any pricing agreements with their competitors; and (2) providing assurances that their prices were the result of independent internal pricing exercises.<sup>203</sup> RITES reviewed these responses, performed a price comparison with similar tenders, and—despite the “obvious” “mutual understanding” among the bidders—recommended that the contract should not be rebid because:

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through RITES INDIA LIMITED (MSM Division) for Malaria Rapid Test Kit under Malaria Control Project, Credit No. Cr-2964-IN, IFB No.: RITES/MSM/MCP/06/2004 opened on January 25, 2005” (Apr. 6, 2005).

<sup>200</sup> BER (One) of IFB No. RITES/MSM/MCP/04/2001, sec. 4.3.

<sup>201</sup> C. Hoban, Operations Manager, letter to S. Kumar, Executive Director, RITES (Dec. 20, 2001).

<sup>202</sup> BER (Two) of IFB No. IFB No. RITES/MSM/MCP/04/2001, sec. 8.2 (p. 10).

<sup>203</sup> *Ibid.* (RITES’ inquiry); R. Gupta, General Manager, RITES, letter to Zeneca Agrochemicals, Ltd. (Jan. 7, 2002) (same); S.S. Mohla, General Manager Sales, Bayer, letter to R. Gupta, General Manager, RITES (Jan. 9, 2002); C. Krishna Rao, Technical Advisor, Zeneca Agrochemicals Ltd., letter to Group General Manager, MSM, RITES (Jan. 10, 2002); G.K. Singh, National Sales Manager, BASF India, letter to Jt. General Manger, RITES (Jan. 10, 2002); Aventis CropScience India Ltd., letter to Group General Manager, MSM, RITES (Jan. 10, 2002).

- The prices submitted by the bidders were in line with the prices previously quoted on similar tenders (adjusted for inflation).<sup>204</sup>
- The bidders were the only four major suppliers of pyrethroids that were registered in India, licensed with the CIB, and had bid on previous pyrethroids tenders.<sup>205</sup>
- The procured pyrethroids needed to be delivered in time for the spraying season, so a re-bidding delay would be detrimental to the project.<sup>206</sup>

RITES recommended that the Borrower should address this collusion by sending a letter to Bayer, Zeneca, BASF, and Aventis suggesting that they refrain from sharing bid price information in the future; RITES did not recommend any stronger action, such as a referral to India's Vigilance Commission or any law enforcement agency.<sup>207</sup>

## 2. *Indicators of Collusion in Bed Nets*

As detailed above, the DIR found numerous indicators that MCP bed net contract bidders Superior Fabrics, EMCO, GSW, and HAL were interrelated. At one point, RITES received an allegation that Superior was associated with EMCO and GSW. RITES investigated the matter, but provided only a superficial denial of the allegation, determining that EMCO and GSW:

are managed by different set of people and there is nothing to prove that they are group companies of M/s Superior Fabrics, Kanpur. It would be worthwhile to mention here that M/s Superior Fabrics and M/s EMCO Enterprises are proprietary firms being run by different persons, and M/s Global Spin-Weave Ltd is a limited firm being managed by three Directors one of, [*sic*] which one director out of three is of the same name as the proprietor of M/s Superior Fabrics and another director is by the same name as proprietor of EMCO Enterprises. Since the contribution

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<sup>204</sup> RITES used previous MCP tenders won by the four possibly colluding firms as their "market price" reference points. BER (Two) of IFB No. IFB No. RITES/MSM/MCP/04/2001, sec. 8.2, (p. 11). These prices are an inappropriate reference point because, if the four firms were colluding, one would expect these prices to be tainted by that collusion in the same way that the instant tender's prices were tainted.

<sup>205</sup> At the time of these inquiries (January 2002), CIB Chairman Dr. S.P. Aggarwal was also Director General of Health Services in the Ministry of Health and Family Welfare.

<sup>206</sup> BER (Two) of IFB No. IFB No. RITES/MSM/MCP/04/2001, sec. 8.2 (p. 12).

<sup>207</sup> *Ibid.*, sec. 8.2 (p. 12).

of all these firms is different, it is difficult to categorize them.<sup>208</sup>

RITES also appeared to address insufficiently other red flags in relation to bed nets procurement. For example, in 2003, the Thai firm Akrungaroon Industry Co., Ltd., sent RITES a letter following its disqualification as the lowest bidder because it had not responded to an amendment requesting bidders to increase their bed net quantities and the amount of their bid securities.<sup>209</sup> Akrungaroon argued to RITES that it had never received the request and that, if it had, it “would have quoted accordingly and would have given the revised bid security amount.”<sup>210</sup> In a letter to the Bank, RITES expressed surprise at having received Akrungaroon’s letter and avoided the substance of the complaint. Instead, RITES dismissed the matter by claiming that Akrungaroon’s letter had been “doctored” and that it “ha[d] no further comments to offer in this regard.”<sup>211</sup> Further, RITES did not appear to have followed up on a complaint from Akrungaroon in February 2005, which alleged that Indian companies were receiving undue favor.<sup>212</sup>

#### **D. Indicators of Collusion Ended at the Same Time on Multiple RITES Procurements**

As discussed above, the DIR found indicators of collusion on multiple RITES-administered procurements. But in 2004, these indicators simultaneously appeared to cease in procurements for pyrethroids and DEC tablets, while competition increased for chloroquine phosphate contracts.<sup>213</sup> The fact that two, and potentially three, distinct groups of bidders changed their behavior during the same period suggests that an outside source may have impacted their decision to cease colluding. In one case for the procurement of pyrethroids, the DIR was able to partially link the end of colluding activities to a change in key staff in RITES. Further inquiries are needed to fully understand how this change in personnel and other factors may have influenced the apparent collusive activities.

<sup>208</sup> Brief Note for the meeting of Purchase Advisory Committee held for procurement of Mosquito Bed Nets under World Bank financed: Enhanced Malaria Control Project against RITES IFB No.RITES/MSM/MCP/02/2003, p. 12 (Annexure II).

<sup>209</sup> Akrungaroon Industry Co., Ltd. letter to RITES (Jun. 17, 2003).

<sup>210</sup> *Ibid.*

<sup>211</sup> Rajneesh Gupta, Addl. General Manager, RITES to World Bank Operations Advisor (Oct. 15, 2003).

<sup>212</sup> Akrungaroon Industry Co., Ltd. letter to World Bank Senior Procurement Specialist (Feb. 4, 2005) which was faxed to RITES on Feb. 9, 2000. INT did not receive a copy of this complaint until after the DIR had begun. The DIR attempted to contact this company, but was unsuccessful.

<sup>213</sup> Other procurements followed a different trend, with indicators in bed nets and combi-blister packs increasing after 2004 and indicators on arteether contracts remaining steady throughout the project.

## Competitive International Bidding Prevented

The DIR also found indicators that competition in ICBs was sometimes hampered by the contract requirement that bidders for pyrethroid contracts be registered with India's CIB and licensed to sell pyrethroids in India.<sup>214</sup> The Bank gave its No Objection to this requirement. The requirement, however, had the apparent effect of stifling competition for the pyrethroid contracts to the benefit of the apparent cartel due to the difficulty of foreign firms in obtaining the registration. For example:

- UK-based Agropharm Ltd. initially won a contract under Schedule VIII of tender RITES/MSM/MCP/04/2002.<sup>215</sup> However, the contract award was conditioned on Agropharm obtaining a CIB registration and license.<sup>216</sup> Agropharm and its Indian agent attempted for more than eight months to obtain a license, but was refused by the CIB on the grounds that licenses could be granted only to companies with operations in India.<sup>217</sup> Consequently, RITES awarded the contract to Bayer, a member of the apparent cartel and the next lowest evaluated bidder with a unit price nearly twice that of Agropharm.<sup>218</sup>
- Similarly, in a March 10, 2000, complaint to INT, Cyanamid alleged that it had attempted to obtain CIB registration since 1997, but the process had been delayed because of competitor interference and that its lack of license could prevent it from receiving MCP contracts.<sup>219</sup>

Further, it appears that the CIB's license-issuance process was non-transparent and tainted by corrupt practices. When interviewed by the DIR, Agropharm representatives recalled that their local agent, D.B. Jain from SSG Investments, said that the CIB registration process could be accelerated by making a facilitation payment, but would not discuss any details.<sup>220</sup> Agropharm's internal documents also indicate that the company was unable to obtain a license because it refused to pay

<sup>214</sup> See, e.g., Bid Document for Synthetic Pyrethroids, IFB No. RITES/MSM/MCP/04/2001, Section III (ITB Bid Data Sheet, Line 7.3 (to be inserted as Section 13.3(f) of Section II – Instruction to Bidders)).

<sup>215</sup> Supplementary BER of IFB No. RITES/MSM/MCP/04/2002, sec. 8.1.

<sup>216</sup> *Ibid.*, sec. 7.1.1, para. 9.

<sup>217</sup> D.B. Jain, Director, SSG Investments, letter to S.P. Aggarwal, Chairman, CIB (Sept. 8, 2003) (complaining of the CIB's refusal to issue Agropharm a registration certification).

<sup>218</sup> RITES Notification of Award of IFB No. RITES/MSM/MCP/04/2002 to Bayer India Ltd. (Dec. 15, 2003). Agropharm's price was equivalent to USD 25.1 per kg for a 10 percent concentration, while Bayer's price was USD 47 per kg for a 10 percent concentration.

<sup>219</sup> Complaint from J.L. Chambers, Asst. Dir. for Int'l Project Funding, American Home Products (Cyanamid's parent firm) re: collusion on tender RITES/MSM/MCP/02/1999, p. 2 (Mar. 10, 2000).

<sup>220</sup> Interview of Agropharm, para. 10 (May 4, 2007).

the members of the CIB. Correspondence between Mr. Jain and Agropharm reveal that on several occasions, Mr. Jain clearly indicated that the company would have to pay a facilitation fee to receive a license:

- Just after the December 27, 2002 bid opening date, Mr. Jain sent several e-mails in which he indicated that the registration process with the CIB would be cumbersome and long but could be accelerated for USD 20,000.<sup>221</sup> In follow-up communications, Mr. Jain requested cash advances in order to ensure that the registration process moved swiftly and that “promises [were] kept by persons receiving payments.”<sup>222</sup>
- As the bid evaluation process progressed, the CIB’s pressure for bribes increased. Mr. Jain referred to between GBP 50,000 (USD 80,000<sup>223</sup>) and GBP 10,000 (USD 16,000) in “hush money” that should be distributed to the eight members of the CIB commission and “the rest of the team,” respectively.<sup>224</sup>

Agropharm management flatly rejected Mr. Jain’s “hush money” proposal, and Agropharm’s representatives only recalled paying Mr. Jain a five percent success fee in exchange for Agropharm obtaining this registration.<sup>225</sup> Agropharm’s representatives noted, however, that Mr. Jain’s fee was high for obtaining a registration, because fees for this work usually only ranged from USD 2,000 to 3,000.<sup>226</sup>

MCP’s ICR highlighted the requirement for CIB registration as one of the two specific problems that merited Bank attention. Referring to the Agropharm case without naming the company, the ICR stated that one firm’s inability to get registered contributed to the project’s slow implementation.<sup>227</sup> As a result of the slow registration process, the Government of India and the Bank agreed that all future procurements would be handled through NCB and only include companies registered with CIB at the time of the bid submission.<sup>228</sup> Far from resolving Agropharm’s

<sup>221</sup> D.B. Jain e-mail to Geoff Foxon (Dec. 28, 2002) (stating that the CIB registration process will require “some funding”); D.B. Jain email to Geoff Foxon (Dec. 30, 2002) (stating that it will require USD 20,000 to expedite the CIB registration process); D.B. Jain e-mail to Geoff Foxon (Dec. 31, 2002) (stating that “expenditure will be necessary to obtain time bound results” in CIB registration process). Mr. Jain refused to be interviewed regarding this matter. Record of Interview of D.B. Jain (Apr. 27, 2007).

<sup>222</sup> D.B. Jain e-mail to Agropharm (Jan. 08, 2003).

<sup>223</sup> The exchange rate on Feb. 18, 2003, was USD 1 = GBP 0.6253.

<sup>224</sup> D.B. Jain e-mail to Bryan Shand, Agropharm Ltd. (Feb. 18, 2003).

<sup>225</sup> Bryan Shand, Agropharm Ltd., facsimile to D.B. Jain (Feb. 18, 2002) (stating that the hush money payment “is not even on the table”); Record of Interview of Agropharm, para. 12 (May 4, 2007) (success fee payment only).

<sup>226</sup> Interview of Agropharm, para. 12 (May 4, 2007).

<sup>227</sup> MCP ICR, p. 19.

<sup>228</sup> *Ibid.*

problem, this solution potentially worsened the chance for increased competition from non-Indian firms and ensured more opportunities for contract awards for the apparent cartel.

## Analysis of Supply Chain

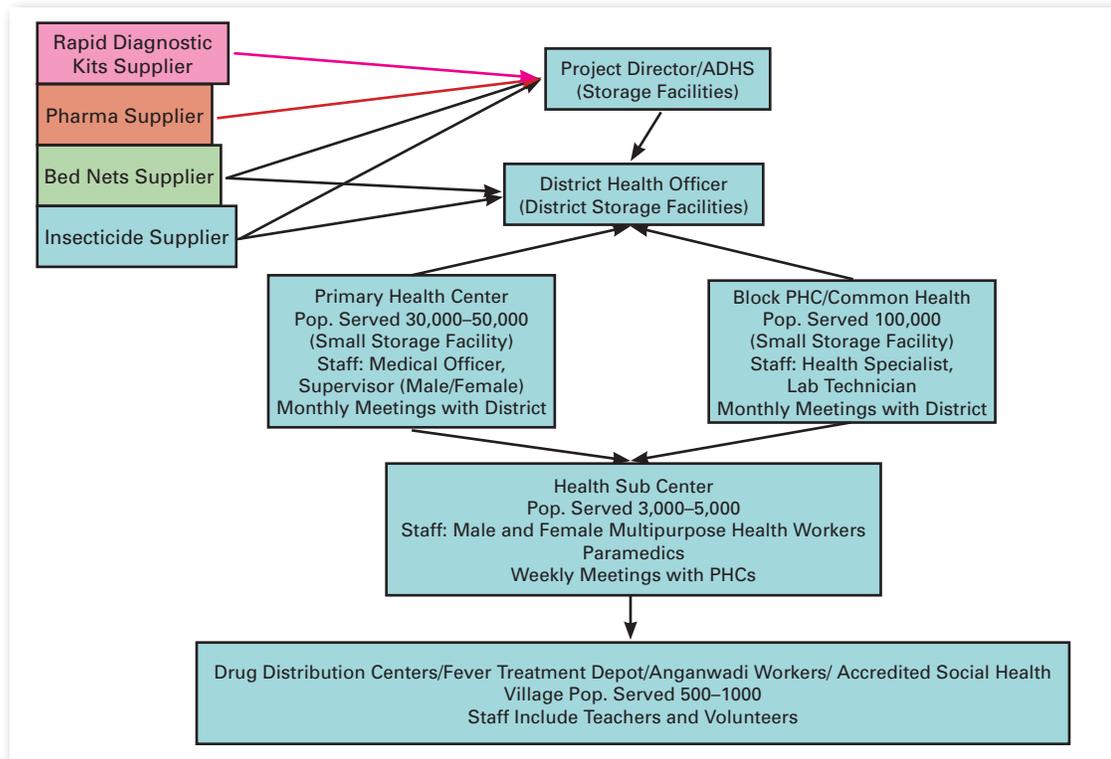
The DIR visited sites associated with the first two links of the MCP supply chain regarding the receipt and distribution of goods supplied under the project. In doing so, the DIR visited a total of 15 sites across three states: Maharashtra, Chhattisgarh, and Orissa, visiting:

- *Maharashtra*. SMO in Pune; the medical store in Mumbai; the DMOs in Thane and Nagpur; and a PHC in Raipur.
- *Chhattisgarh*. SMO in Raipur; DMOs in Durg, Rajnandgaon, Kanker, and Bastar; and a CHC (Lohandi Guda) near Jagdalpur.
- *Orissa*. SMO in Bhubaneswar; DMOs in Dhenkanal, Cuttack, and Mayurbhanj.

During these site visits, the DIR viewed the SMOs and DMOs, storage facilities, and stock rooms. The DIR also reviewed the inventory records and systems at each of the facilities and how the facilities addressed the management of the incoming and outgoing inventory stocks, expiry dates, quality testing and under-deliveries. Within each state and district visited, the DIR also spoke with the state malaria officers (SM Officers) and district malaria officers (DM Officers) and with various individuals responsible for managing and/or administering the supply chain. The DIR also conducted certain tests of the supply chain and inventory system pertaining to the contracted supply, delivery, and distribution of primarily pyrethroids, bed nets, and pharmaceuticals from 18 contracts identified from the DIR's procurement review as exhibiting some indicators of fraud and corruption.

### A. Overview of the MCP Supply Chain and Facilities (State, District, Local Centers)

Figure 21 provides an overview of the supply of goods delivered under the MCP:

**Figure 21. Overview of MCP Supply Chain of Goods Implementation**

Source: Interview of Dr. Gandham N.V. Ramana; Lead Public Health Specialist; World Bank Delhi (Mar. 3, 2007).

## B. District Malaria Offices

The DMOs are usually located in the city centers or suburban areas and are mostly dedicated standalone buildings. Occasionally, the DMO is housed in buildings or compounds that are part of the local health infrastructure, such as a district hospital, or the chief medical officer headquarters responsible for all public health activities in a district.

The DMOs were usually found to be in a relatively fair state, with padlocks on the doors and windows that are generally barred or protected with wooden windshields. The DMO includes administrative offices and a laboratory for the processing and microscopic review of blood smears.

## C. Storage Facilities

### 1. Organization and Layout

Antimalaria commodities were stored in several places and scattered across different rooms in the DMO building, a nearby warehouse, or sometimes in the

district headquarters hospital. At the district level, the storage room for pharmaceuticals was usually part of the DMO building, whereas bed nets and pyrethroids were mostly stored in separate facilities because of the volume of these items and the risk of storing hazardous materials. In many instances, the storage rooms for antimalaria commodities were used to store various items not related to malaria, in particular when the DMO was also in charge of other programs, such as for leprosy, that were funded by other entities (the state, the Government of India, or another international agency).

The DIR observed that the storage rooms always had padlock doors and windows (with or without windows depending on the building) that were secured with bars or inside/outside wooden shutters. In none of the sites visited did the DIR perceive that the security of the storage rooms might be a serious issue as all drugs appeared to be secured, and in some instances there was a guard at the warehouse or the warehouse was part of a compound that benefited from permanent security. In one instance (Nagpur district in Maharashtra), it appeared that the overflow of pyrethroids had to be stored outside the storage area in the open air with no precaution in terms of preventing theft or health hazards.

Antimalaria drugs delivered in bulk were stacked in their original packaging on the floor without any shelving except in a few occasions. When in smaller quantities and containers, most places had some kind of locked pharmacy cabinet to store drugs that could be delivered onsite at the DMO. The different stocks appeared to be spaced and zoned in a separate area according to the type of drugs, although there were no clear indications of which drugs were where except in the case of one district for which the storage had obviously been staged for the DIR's site visit (Mayurbhanj district in Orissa) and one CHC (Lohandi Guda) whose storekeeper appeared to be very meticulous in terms of labeling and could be commended for this best practice.

Although there was usually an informal separation of storage zones by procuring agency (Government of India, Bank, state, other international agencies), it was not formally organized and there was no clear separation between projects. Similarly, the stock registers did not contain any information pertaining to storage location of the drugs. In several occasions the DIR found pharmaceuticals bought under the MCP mixed with others bought under National Vector Borne Diseases Control Program, for example.

## 2. *Temperature Control*

In all of the warehouses visited, the storage rooms had no temperature and humidity control systems. In some cases, there were ventilators, but they were not sufficient to keep the rooms at a cool temperature. Also, the ventilators were usually left off and only switched on when staff were active in the store room.

The DIR inquired about the storage of rapid diagnostic kits that should be kept at a temperature below 30°C (or 40°C for the latest ones) and was told that most of the DMOs and SMOs indicated that these kits were usually immediately dispatched to the PHCs, which will have the necessary equipment to store medicines and vaccines at a cool temperature and therefore could keep the diagnostics in proper conditions.

However, the DMO for the Durg district in Chhattisgarh who had a limited and cramped storage room with no ventilator indicated that such situation could lead to the alteration of diagnostic kits as the temperatures could easily reach 47°–48°C during the summer. This same DMO commented that the state usually procured poor quality equipment and procured pharmaceuticals that the DMO did not have the capacity to warehouse.

## **D. Inventory Systems Used by the SMO and DMO**

All facilities visited by the DIR had dedicated stock clerks whose level of education varied from basic (such as in Dhenkanal) to pharmacist (Cuttack). The inventory system is usually first expired first out and is based on a handwritten stock book/register system with generally a color-coded system whereby receipts are written in red ink and disbursements are written in blue ink.

At the district level for antimalaria drugs, the DIR had to rely on the date of delivery and quantities to be able to trace back to a specific contract the commodities delivered by the state because the registers did not include the name of the manufacturer nor the reference to RITES. At the state level, the stock register usually incorporated the name of the manufacturer and the RITES reference enabling the DIR to trace the delivery of commodities from the manufacturer to the state and downwards to each district.

At the time of dispatch to other facilities, the stock documented the quantities issued to each location but did not list individual batch numbers delivered to the district or the PHC. The stock registers were usually organized time-wise, indexed by type of goods and numbered in numerical order from the oldest to the newest

transaction. None of the stock registers had references to the storage zones in order to easily locate the drugs physically in the warehouses. In most cases, considering the size of the storage room, the DIR did not find it a critical issue, but in some instances the commodities were scattered in several different rooms of the same building or different locations (SMO for Orissa) and only the staff in charge of the store was able to locate the commodities. The DIR needed to survey all the storage rooms in order to be able to locate and account for all the commodities.

In nearly all stock registers at the district level, individual entries did not indicate the procurement agency (Government of India, state, RITES, other international agencies) or the RITES contract reference, which made it difficult for the DIR to identify deliveries with respect to specific Bank-financed contracts. Furthermore, in some instances, the entries commingled deliveries of state or Bank-procured drugs, sometimes mixing deliveries also received from any additional divisions (such as in Maharashtra), making it difficult to track the deliveries and verify inventories from one level to the other for a specific Bank-financed contract.

Upon request for supporting documents for specific RITES contracts with regard to direct deliveries from the suppliers to the districts—in particular, bed nets and synthetic pyrethroids—the stock officer provided the DIR a file that contained for an individual commodity (or grouped transactions of the same commodity at similar periods) copies of the RITES inspection certificate, acceptance certificates, copies of any invoice from the supplier, various correspondence, and copies of any delivery receipt issued by the transporter.

## **E. Inventory Documents and Records**

The DMOs and SMOs visited by the DIR in general had good records of the receipts of goods except for the few issues described previously. However, in a few instances the DIR came across stock officers who were not able to provide the relevant supporting documentation. The DIR concluded that these few instances were specific to the DMO and SMO rather than a systemic pattern of disorganized files. For example:

- *Dhenkanal District, Orissa state.* The DIR noted that the record keeping was disorganized. According to the stock clerk, there was a register for drugs for years 2003–2004, but it did not contain any reference to vouchers for the distribution of drugs. Furthermore, a register for years 2005–2006 had been created by the previous stock clerk, but it had not been updated.

Similarly, when the DIR surveyed the storage rooms the DIR could not find the drugs as listed according to the stock register.

- *SMO Raipur, Chhattisgarh state.* The store officer said that the SMO had not retained stock registers older than 2004. Thus, the records for several contracts were not available for the DIR to review or to trace further distribution of the drugs.
- *Jagdapur, Chhattisgarh state.* The stock officer noted that the state voucher (recording the delivery to the DMO and being the basis for the stock register entry) was received separately by courier and sometimes arrived before the commodities. Such lack of coordination sometimes created discrepancies.<sup>229</sup> In case of direct deliveries, the transporter's document was the basis for the entry.

## F. Inventory Management

At the SMO level, the warehouse was replenished by the suppliers of drugs, bed nets, and pyrethroids on the basis of consignee lists established at the national level by RITES and the national malaria officer based on historical data on the epidemiology situation. Although the bulk of the bed nets and pyrethroids were delivered directly to the districts, the SMOs could also store such items as a buffer stock in case of emergency.

Regarding the distribution down the supply chain, the three SM Officers explained to the DIR that every month, they received a status report on the implementation of the MCP from the districts. The SM Officer then met with the DM Officers of all districts to discuss the balance of all their respective stocks and receive the requests of delivery updated for the next six months.

At the district level, stock clerks could receive commodities either from the state or division warehouse (where applicable, *e.g.*, Maharashtra) for drugs, or directly from the suppliers for the bulky items such as bed nets and pyrethroids.

On the disbursement side from the districts, the PHCs gave their requirement monthly to the DM Officer during a meeting at the DMO. In some cases, when the epidemiology situation required it, the PHCs were supplied on demand. The PHC could either pick up the drugs themselves at the time of the monthly meeting or have them delivered by the DMO. The DMO or stock clerks would moni-

<sup>229</sup> In the case of contract RITES/MSM/MCP/05/2003/272, the stock officer had recorded that he received 20 liters of synthetic pyrethroids manufactured by Gharda and delivered by the state, based on a voucher he had received from the state. But as the commodities were not delivered, he canceled the entry.

tor the stock of the PHCs as the PHC staff submitted a monthly report listing the balances (starting and ending) for each type of drugs to ensure proper utilization of the PHC's stocks by comparing the results with positive cases following blood testing.

## **G. Quality Testing**

### *1. Tests for Damaged Goods*

Stock clerks for both SMOs and DMOs indicated that they received the goods and conducted a cursory inspection of the physical state of the packaging boxes and listed the batches in the stock register. All stock clerks asserted that they counted the boxes received by the manufacturer before signing the acknowledgment receipt. Except in one district (Bastar in Chhattisgarh, where the DIR observed broken plastic jars of 5,000 DEC tablets), stock clerks and DM Officers indicated no receipts of damaged products.

### *2. Tests for Quality and Damaged Items*

SM Officers and DM Officers for all districts indicated that an inspection and test of the quality of the commodities were not conducted at the time of dispatch, as testing occurred centrally at the producer's facility prior to the drugs being shipped to the state warehouses. Stock clerks checked that the RITES inspection certificate was attached to the deliveries of drugs (at the SMO level) or bed nets and pyrethroids (at the DMO level). The MCP staff does not, however, retain a sample for control purposes in case there was an issue on a drug. DM Officers and stock clerks indicated that they do not have the resources to do so and could not perform such tests with the limited amount of staff and equipment. Both Maharashtra and Orissa also added that the inspector for the state health services also took random samples in order to test the quality of the drugs.

In most cases, the DM Officers indicated that they had never received any complaints on the quality and efficiency of the drugs received. DM Officers indicated that there was a good clinical response when the drugs were administered and positive feedback from the medical officers in the PHC. Some of the DM Officers, who were doctors at the district hospital or public general doctors, said they were able to witness themselves the efficiency of the drugs.

### *3. Observed Quality Issues*

In contrast to the positive feedback generally provided to the DIR at the facilities it visited regarding the quality of the antimalaria commodities, there were a

few instances where the DM Officers and stock clerks noted some issues on the quality of the products delivered. In all cases, the staff was only able to recall the defective product and the name of the supplier, but was not able to link it to a specific RITES contract reference. Furthermore, as none of the facilities visited had the ability to conduct chemical tests of the drugs, the feedback provided related more to the general aspect of the commodities delivered. For example:

- *Mayurbhanj, Orissa state.* The DM Officer indicated that the district had faced some problems with the delivery of bed nets from EMCO, but not with any other commodity. These issues are described further in the Bed Nets section of this chapter.
- *Cuttack, Orissa state.* The stock clerk and pharmacist indicated that the district had faced only two problems. One of them related to receiving verbal complaints from households receiving the DEC tablets received in bulk (5,000 tablet jars). The complaints alleged that the tablets would quickly crumble and lose their color once distributed. The person the DIR spoke to remembered that these were Pure Pharma tablets and that the Assistant DM Officer had asked to receive blister strips instead of loose tablets to avoid this problem. The other problem related to the receipt of defective and poor quality bed nets from EMCO, which is described further in the Bed Nets section of this chapter.
- *Dhenkanal, Orissa state.* The DM Officer indicated that he had also received verbal complaints from the households receiving DEC tablets to fight *Philaria* during the Mass Drug Administration. The complaints alleged that the loose tablets received in bulk (5,000 tablet jars) absorbed moisture from the air and quickly crumbled and lost their color once distributed. None of the staff could remember the manufacturer of the tablets, but the DM Officer had suggested the state officer to ask for blister strips instead of loose tablets to avoid this problem.
- *Rajnandgaon, Chhattisgarh state.* The DM Officer indicated that there had been some questions on the efficiency of some synthetic pyrethroids (Alphacypermetrin) and the level of concentration, but he had no details pertaining to the specific contract. He added that these were just perceptions as there had not been any independent chemical testing besides the RITES certificates. The state malaria officer, Mr. Kataryia indicated that there had been a drop in the prices of these insecticides and it might have

affected the quality. He gave examples of price variations between the beginning of the project and its end.

## **H. Monitoring of Expiry Dates**

The SM Officers explained that drugs did not stay more than three to six months in the warehouse; therefore, it was unlikely that any drugs left the state warehouse with an expired date. They explained that if some drugs would be close to the expiry date, they would contact the local district hospitals and DMOs to enquire whether they needed additional stocks.

Similarly, the DM Officers explained that the drugs were always used before the expiry date, as there is a high demand and short supply. The stock clerks said that they manage the stock carefully, remained aware of expiry dates, and provided a monthly update of the stock to the DM Officer. If some drugs were close to the expiry date, the DM Officers would contact other DM Officers, other divisions, or the state health services directors to alert these entities that the drugs should be reallocated to other facilities.

The DIR did not detect any drugs that had expired during its visits to the warehouses. None of the DM Officers and SM Officers indicated that they had faced such situations for Bank-financed drugs, and they all indicated being fully aware of the disposal policies in place. One DM Officer recalled that he had received a consignment of 11,000 primaquine tablets procured by the state that had expired and indicated he had refused the delivery.

## **I. Issues of Under-Deliveries**

According to the DM Officers and SM Officers, the stock clerks counted the boxes received by the manufacturer before signing the acknowledgment receipt. Staff responsible for the stock management consistently stated that they never accepted any damaged products delivered or consignment with lower quantities than expected. In the events such short supply occurred, these officials stated that they would have signed the acceptance receipt for the actual quantities delivered.

In most of the cases, the DIR found that the stock registers were consistent between the SMOs and DMOs and with the physical stock on hand. However, the DIR detected some discrepancies as described on the following pages.

### 1. *Commodities Could Not Be Accounted For*

The DIR detected discrepancies between the documentation available for review and the actual stocks available, such as commodities delivered in lower quantities than what the documentation indicates.<sup>230</sup> The most egregious example is where none of the commodities are delivered from one layer of the supply chain to the next. For example:

- On RITES/MSM/MCP/05/2004/243, 520,000 chloroquine tablets were to be delivered by Nestor Pharmaceuticals. The SMO in Bhubaneswar had documentation representing that the DMO Dhenkanal should have received 520,000 tablets. Accordingly, the corresponding entry in the DMO stock register listed 520,000 tablets received on May 20, 2005. However, as the DIR surveyed the DMO storage room, there was no trace of any of these tablets, although according to the stock register, there had been no dispatch of such tablets. The stock clerk was unable to account for these 520,000 tablets.
- On RITES/MSM/MCP/05/2003/221, 1.2 million chloroquine tablets were to be delivered by Pure Pharma. According to the stock registers of the Orissa SMO, the DMO Dhenkanal should have received two deliveries of 1 million tablets in May 2004 and 200,000 in January 2005 and the DMO stock register indicated a balance of 57,000. However, as the DIR surveyed the DMO storage room, there was no trace of any of these tablets although according to the stock register, there had been no dispatch of such tablets. The stock clerk was unable to account for these 57,000 tablets.

In Chhattisgarh state, the DIR found delivery issues in four of the five locations it visited:

- *Raipur*. In the SMO warehouse, the DIR observed anomalies on the contract reference RITES/MSM/MCP/09/2003/229 for the delivery of Rapid Diag-

<sup>230</sup> These issues can be divided in two types: (1) when commodities are delivered directly from the supplier to the malaria official, the discrepancies between the initial list of consignees listed in the contracts and the actual deliveries or the differences between the acceptance certificates and the stock registers reflect a problem in the supply chain. These discrepancies can be explained by amendments to the contracts, reallocations of shipments by the Government of India to answer emergency situations, or underdeliveries by the supplier. The DIR tried whenever possible and whenever the documentation was available to follow up on these matters. Such problems could occur for direct deliveries of bed nets and pyrethroids from the manufacturers to the DMOs and for anti-malaria drugs from the producers to the SMOs; and (2) when the DIR noted discrepancies between the records from the SMOs and the DMOs supporting documentation, or between the stock registers and the actual inventory in the various warehouses, such issues might have related to poor record keeping or be the results of reassignment of shipments by the SMOs. The DIR is not in a position to determine if such failures to update registers at the receipts of goods or/and at the dispatch to DMOs and PHCs, or to document reallocation of commodities, was intentional or the result of limited capacities of the local staff.

nostic Kits by Span Diagnostics. Documents reviewed by the DIR showed that the SMO should receive 125,000 Rapid Diagnostic Kits according to the consignee list provided by RITES and the SMO. However, the stock register indicated that the delivery was only 123,750—a short of 1,250.

- *Durg.* The DIR identified a minor issue regarding contract reference RITES/MSM/MCP/08/2000/251 for the delivery of bed nets by Chemicals International. Asked if he faced a situation where consignment was of lower quantities than expected, the DM Officer indicated that he had faced two similar situations for direct deliveries of bed nets where there were discrepancies between the invoice and the actual deliveries. The company Chemicals delivered bags of bed nets which would have a couple less bed nets out of a hundred. The DM Officer complained to the company and said he would provide the letters to the DIR.<sup>231</sup>
- *Kanker.* The DIR had numerous difficulties in trying to reconcile the stock registers and the actual inventory held in the DMO's storage.

In Maharashtra state, the DIR also detected similar delivery issues in four of the five locations it visited.<sup>232</sup>

## 2. *Systemic Shortage Issues on Some Contracts*

In the case of two contracts reviewed, the DIR identified the same issues in several locations. Further review of the documentation made available by RITES did not yield any explanations in terms of amendments of the contracts or reallocations of consignment to other consignees. Due to this lack of supporting documentation, the DIR was unable to determine whether such short deliveries are the result of intentional fraud by the supplier or poor record keeping by the various DMOs and SMOs.

- Contract RITES/MSM/MCP/08/2005/272 for the delivery of liquid pyrethroids by Gharda. At some locations the DIR found short supplies in comparison to the initial consignee lists. However, the final acceptance certificates were issued consistently in accordance with the actual deliveries. Nevertheless, the DIR was unable to locate any amendments of the

<sup>231</sup> Despite the DIR's request to review this correspondence in India, waiting onsite while the clerk officer was searching his records, and follow-up requests through the state officer, the DIR did not receive these letters.

<sup>232</sup> For example, RITES/MSM/MCP/15/2004/266 was for the delivery of chloroquine tablets by Pure Pharma. According to the stock register from the SMO in Pune, the ADHS should have received 600,000 tablets in one delivery. However, the stock register of the ADHS Nagpur listed two deliveries in October 2006 (78,000 tablets) and November 2006 (480,000 tablets) totaling 558,000 tablets, *i.e.*, a short supply of 42,000 tablets.

contracts and/or change of the consignee list in the documentation provided by RITES.

- Contract RITES/MSM/MCP/06/2004/257 for the delivery of Rapid Diagnostic Kits by Orchid Biomedical Systems. According to the stock register of the SMO Chhattisgarh in Raipur, the state had received 190,000 of these kits. The DIR found issues in the further distribution of these kits in the following locations in Chhattisgarh:
  - *Kanker*. The DMO should have received three deliveries for a total of 18,750 units in 2005, but the DIR was not able to trace any documentation regarding the last one in November 2005 for 7,650 units. There was no entry in the stock register or any supporting voucher for receipt/dispatch of these Rapid Diagnostic Kits. Furthermore, for the first two deliveries in August 2005, there was no stock available although the stock registers indicated that there should be a balance of 60 available from each delivery. The DM Officer argued that the kits had been dispatched to the local hospital lab but there was no supporting documentation for this assertion and the hospital lab was not open at the time of the DIR's visit, preventing the DIR to verify this.
  - *Baster*. Out of the three deliveries received in 2005 by the DMO for a total of 37,250 Rapid Diagnostic Kits, there was a 50 unit discrepancy between the entry in the SMO register and the corresponding receipt in the DMO's register for the last delivery in November 2005 (16,250 delivered by the SMO but 16,200 recorded by the DMO).
  - *Durg*. Based on the SMO's stock register, the DMO should have received two deliveries in 2005 for a total of 31,800 units. However, according to the DMO's stock register, the first delivery in August 2005 was only 15,000 instead of 18,000 initially (it seems that there had been a correction of the SMO's register to make it consistent with the DMO's one at 15,000). For the second delivery of 13,800 Rapid Diagnostic Kits in November 2005, there was no entry in the stock ledger nor any available supporting voucher or stock available. It seemed that the shipment was never received.

## Procurement at The State and District Level

In its review of procurement at the state and district level, the DIR found indicators that the DMOs reviewed utilized improper procurement methods in violation of the MCP credit agreement and that bidders engaged in fictitious competition. In Nagpur, the DIR found that the DMO improperly used direct contracting to award contracts that were supposed to be procured using local shopping. Further, the DIR found that one company—Surgimed Enterprises—won all of the contracts awarded in this manner, raising the possibility of favoritism. The DIR also identified patterns indicative of collusive bidding behavior among Mediequip Enterprises, Surgimed Enterprises, Agrawal Scientific, and Advance Surgical & Scientific. Almost 75 percent (by value) of the DIR-reviewed Nagpur contracts exhibited indicators of fraud or corruption.

In Nasik, the DIR found that the DMO improperly utilized direct contracting to award contracts of relatively high value. Further, the DIR identified three pairs of allegedly competing bidders—Sigma Enterprises and Unique Enterprises; Manoj Trading and Tushar Sales; and Raj Art and Jadhav Rubber Stamp—that were associated with each other, *e.g.*, by sharing the same address or phone number. Other bidders submitted bid documents that: (1) exhibited near-identical layouts, format, and language; and (2) quoted bid prices that increased in equal increments. A majority (by value) of the DIR-reviewed Nasik contracts exhibited indicators of fraud or corruption.

### A. Local Contract Review Methodology

Although the MCP ICR states that only four percent of the MCP's expenditures were spent through means other than ICB, limited international bidding (LIB), and NCB procurement, both the DIR and the MCP Task Team Leader calculated that 40 percent of MCP procurements were conducted through non-ICB, LIB, or NCB procurement.<sup>233</sup> This is in line with the PAD's pre-project expectations.<sup>234</sup>

For the review of contracts procured by the states and districts, the DIR chose to review the procurement of contracts procured by the Nagpur and Nasik DMOs in Maharashtra. These two districts were chosen based on the volume of contracts procured and in coordination with the local contract reviews of the other DIR

<sup>233</sup> For the purpose of this report, Local Contracts refers to direct contracting, shopping, NCBs, single source procured at decentralized level, *e.g.*, states and districts. The proportion of the decentralized contract is calculated by deducting the ICB/NCB procured by RITES and which represented USD 61.3 millions from the total disbursed under MCP according to the ICR was USD 103.8 million.

<sup>234</sup> MCP PAD, Annex 6, p. 1.

projects. Whenever possible, the DIR preferred locations other than state capitals, as logistical and other difficulties of visiting such locations might have inhibited Bank supervision and post-procurement review teams, meaning that these districts were more apt to engage in corrupt practices if less supervised. The DIR sorted by value all local contracts procured in the two districts and requested documentation regarding the 50 contracts with the highest value. The DIR focused its review on local shopping procurement and reviewed direct contracting only in cases when it was apparent that the DMO had utilized the improper procurement method. The DIR did not conduct physical inspections and/or end-use audits of any of the local contracts

## **B. Local Contract Data**

Under the MCP, the states' and districts' main procurements were for contractual services (spray workers wages, honoraria to Malaria Link Volunteers); consultants (project director; IEC consultant; accountant; etc.); local IEC activities; and supply of blood slide kits.<sup>235</sup> The DMOs were supposed to use direct contracting for hiring consulting services, and use local shopping procedures for the supply of IEC activities and goods.<sup>236</sup>

The Nagpur DMO provided data indicating that, between January 1999 and June 2006, it had procured 229 contracts through local shopping—primarily contracts for laboratory consumables, office stationery, and printing of forms—and procured 10 contracts through direct contracting. The local shopping contracts had a total value of INR 2,466,880 (USD 54,820), while the direct contracting contracts had a value of INR 217,740 (USD 4,839). The DIR reviewed 50 local shopping contracts worth INR 1,308,338 (USD 29,074), representing 22 percent of the district's local shopping contracts by number and 53 percent of its local shopping contracts by value.

The Nasik DMO provided data indicating that it had procured 65 contracts through local shopping between May 1999 and August 2006, and had procured 103 contracts through direct contracting between June 1999 and August 2006. The local shopping contracts had a total value of INR 827,397 (USD 18,387), while the direct contracting contracts had a total value of INR 3,039,884 (USD 67,553). The DIR reviewed 51 local shopping contracts worth INR 778,997 (USD 17,311),

<sup>235</sup> Information provided by the Task Team Leader Dr. Ramana in June 2007.

<sup>236</sup> The provisions of the Development Credit Agreement require that all procurement should be conducted in accordance with the *Procurement Guidelines*. See Schedule 3.

representing 78 percent of the district’s local shopping contracts by number and 94 percent of its local shopping contracts by value.

Table 16 summarizes the DIR’s local contract review coverage in these two districts.

**Table 16. Total DIR-Reviewed MCP Local Shopping Contracts (in Maharashtra) (values in INR)**

District	Local Shopping Contracts Awarded	Value	Local Shopping Contracts Reviewed	Value	Percent Reviewed in Number	Percent Reviewed in Value
Nagpur	229	2,466,880	50	1,308,338	21.8	53
Nasik	65	827,397	51	778,997	78.5	94

Based on documents provided to the DIR, it appears that: (1) only one contract in Nasik was the subject of a Bank procurement post-review; (2) no contracts in Nagpur were post-reviewed by the Bank; and (3) no project audits were conducted in either of these two locations. The DIR is, therefore, the first detailed review of these procurements ever conducted by the Bank. Accordingly, it appears that the Bank’s post-review system inadequately addressed these decentralized procurements.

### C. Nagpur

Sixty-four percent (by number) of the DIR-reviewed Nagpur local contracts exhibited indicators of fraud or corruption, affecting 72.7 percent of the value of the reviewed Nagpur local contracts.<sup>237</sup>

#### 1. *The DMO Improperly Sole-Sourced for Goods Early in the Project*

The DIR found indicators that, early in the MCP’s life, the DMO sought quotations through local shopping and then awarded subsequent contracts to the original winning firm on a sole sourced basis, in violation of the MCP Credit Agreement.<sup>238</sup> The contracts reviewed contained procurement documentation justifying the sole sourcing practice, which appears to be acceptable under Government of India procurement rules.<sup>239</sup>

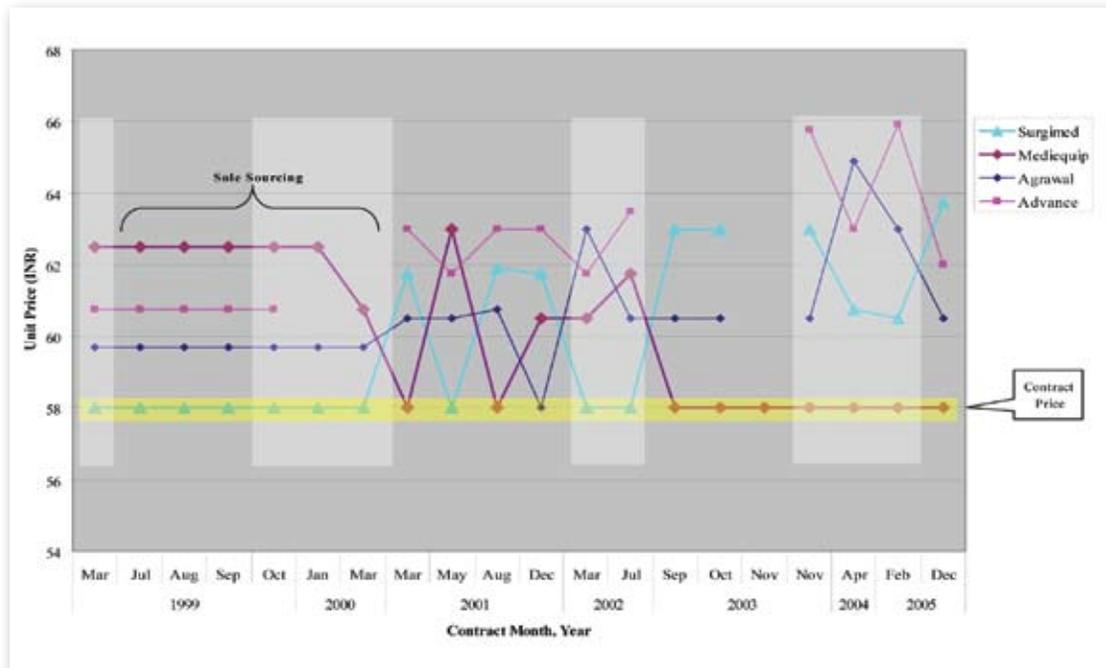
<sup>237</sup> Thirty-two of the 50 contracts reviewed exhibited indicators of fraud and corruption. These contracts were worth a total of INR 933,230 (USD 27,738).

<sup>238</sup> Direct contracting is not allowed under this project for the procurement of goods. MCP Credit Agreement, Schedule 3. This is instead akin to a rate contract, in which a firm is qualified to receive work at a set rate.

<sup>239</sup> During DIR field visits, the DIR was informed that this was a generally accepted practice under Government of India rules.

For example, when reviewing the purchases of glass slides, the DIR reviewed the documentation for the first and fifth through seventh contracts. The first contract was procured through local shopping, but the latter three were procured through direct contracting. A comparison of the DMO's bid prices for all seven contracts over time the DMO revealed the sole-sourcing practice because the DMO reported the number of bidders and bid prices as constant for all the bids (Figure 22).

**Figure 22. Bid Prices for the Procurement of Glass Slides in Nagpur, 1999–2005**



Note: The DIR reviewed the contract documents for the contracts shaded in lighter-colored boxes.

Source: DMO procurement data.

Further, all of the improperly procured contracts—for two separate goods—were awarded to the same company: Surgimed Enterprises. This indicates that the DMO may have improperly favored this firm.

While the DMO's contract documents demonstrated that it used direct contracting, the DMO initially informed the DIR that it had procured these contracts through local shopping (Table 17). Given the clarity of the contract documents themselves, this contradiction is an indicator of either negligence or misrepresentation by the DMO.

**Table 17. Nagpur Local Contracts Misclassified by the DMO as Local Shopping**

WBCN	Date	Contractor	Procurement Method in Data Sheet	Procurement Method in Documents	Item
13163	Oct. 3, 1999	Surgimed Enterprises	Local Shopping	Direct Contracting	slide boxes
12934	Jan. 20, 2000	Surgimed Enterprises	Local Shopping	Direct Contracting	slide boxes
12947	Oct. 1, 1999	Surgimed Enterprises	Local Shopping	Direct Contracting	glass slides
12949	Jan. 20, 2000	Surgimed Enterprises	Local Shopping	Direct Contracting	glass slides
13110	Mar. 10, 2000	Surgimed Enterprises	Local Shopping	Direct Contracting	glass slides

Source: DMO procurement data.

## 2. *Four Companies Engaged in Behavior Indicative of Collusion*

Regardless of the DMO's improper sole sourcing to Surgimed, the DIR found indicators that Surgimed colluded with Agrawal Scientific (Agrawal), Mediequip Enterprises (Mediequip), and possibly Advance Surgical & Scientific (Advance) on contracts for glass slides, slide boxes, and fish ponds. These four firms ultimately won 52 percent (by number) of all local shopping contracts in the district, representing 61 percent of the total value of the district's local shopping contracts.<sup>240</sup>

*Two Competing Companies Shared One Address.* The DIR noted that, as of 2002, Surgimed and Agrawal listed the same address on their bidding documents. These two firms competed against each other in 52 percent of Nagpur's MCP local shopping contracts. Their common address is an indicator of possible collusion.

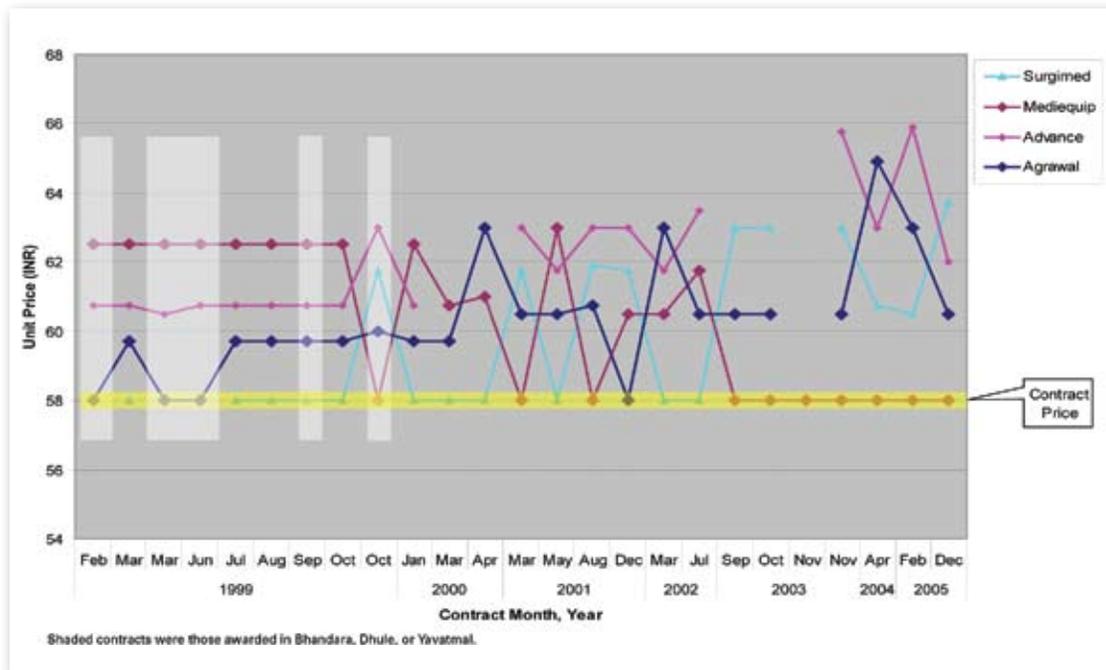
*Companies Engaged in Bid Rotation over Time and within Tenders.* Surgimed was awarded all of Nagpur's glass slide contracts between 1999 and early 2000 through improper sole sourcing practices. For the next two years, however, the DIR observed that Surgimed and Mediequip alternated winning additional glass slide contracts by systematically rotating their prices between one contract and the next. The winning bidder always quoted a unit price of INR 58, while the losing bidder always quoted a unit price of between INR 61 and 63.<sup>241</sup> In 2002, the

<sup>240</sup> In total, these four firms won 119 of the 229 local shopping contracts worth INR 1,507,801 (out of INR 2,466,800 total).

<sup>241</sup> Between 1999 and July 2002, Surgimed won 10 out of 13 of glass slide contracts for glass slides at a constant price of INR 58. On these tenders, Mediequip quoted a price of INR 61.75.

roles of the two companies switched: Mediequip consistently won glass slide contracts with an INR 58 unit price, while Surgimed quoted a losing price of INR 63.<sup>242</sup> Procurement data further indicates that Advance and Agrawal (which appears related to Surgimed) may have bid on these contracts to provide the appearance of (fictitious) competition. Figure 23 summarizes these four firms' bidding patterns in four districts in Maharashtra:

**Figure 23. Bid Prices for the Procurement of Glass Slides in Nagpur, Bhandara, Dhule, and Yavatmal, 1999–2005**



Source: DMO procurement data.

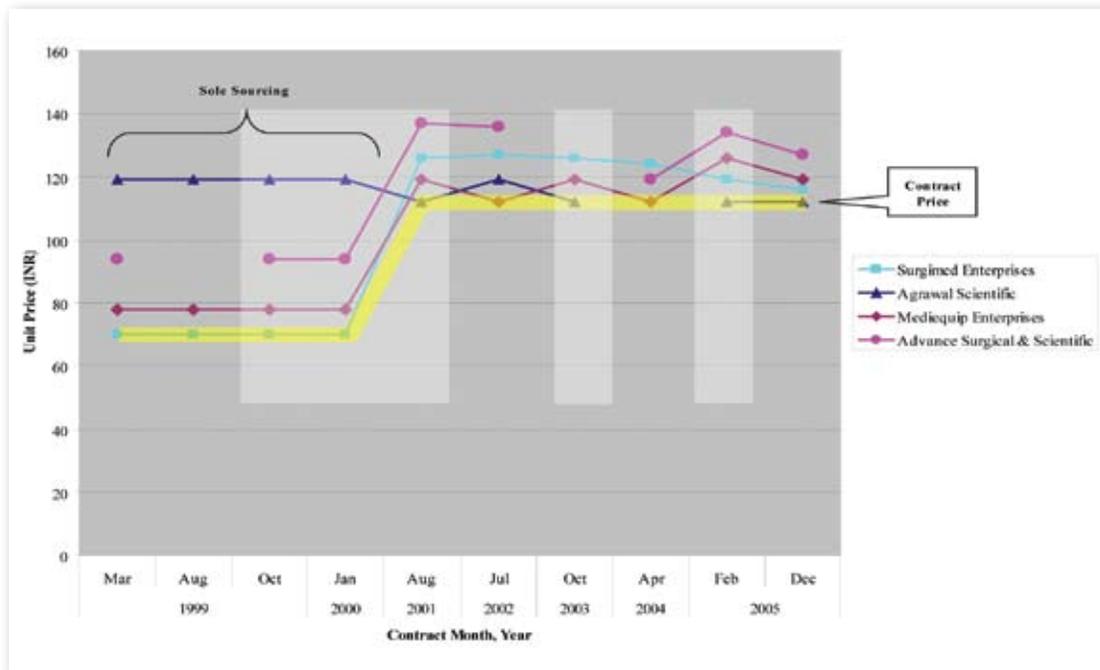
A similar pattern appeared in the four firms' bids for slide box contracts, but in this case Surgimed and Agrawal won the majority of contracts. As with glass slides, the DIR found that the DMO improperly sole sourced all contracts to Surgimed during the project's first year.<sup>243</sup> In 2000, the firms began alternating contracts and bid prices, though the slide box contracts exhibited indicators of price inflation: Surgimed and Mediequip raised their bid prices to Agrawal's level, and Agrawal replaced Surgimed as Mediequip's alternating contractor. This pattern raised the

<sup>242</sup> There was only one occasion in which Agrawal won a glass slide contract that, by pattern, "should" have been won by Surgimed. Otherwise, Agrawal and Advance consistently bid higher prices.

<sup>243</sup> From the outset of the project, Surgimed won all slide box contracts at the same unit price, while all other bidders repeatedly bid the same losing unit prices.

winning contract price by 60 percent.<sup>244</sup> In addition, Agrawal and Mediequip systematically alternated their bid prices by exactly INR 16 or INR 18 for contracts between March 1999 and January 2000, and by exactly INR 7 or INR 8 for contracts between April 2004 and December 2005. Figure 24 demonstrates these bid price patterns.

**Figure 24. Bid Prices for the Procurement of Slide Boxes in Nagpur, 1999–2005**



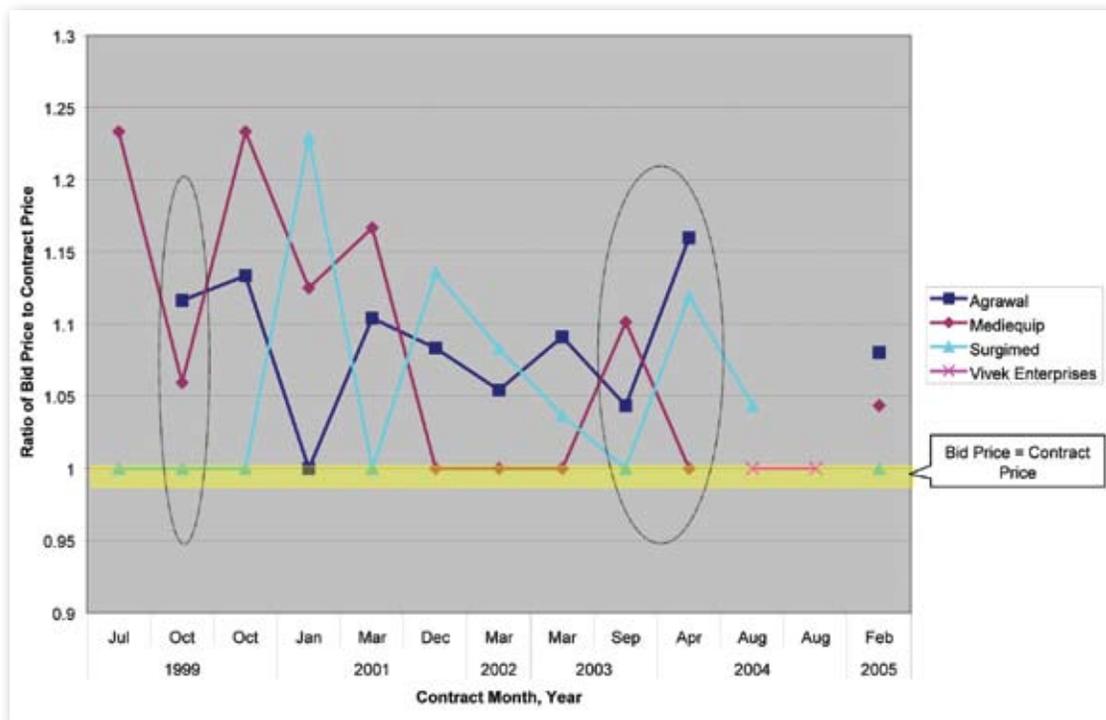
Note: The DIR reviewed the contract documents for the contracts shaded in lighter-colored boxes.

Source: DMO procurement data.

Mediequip, Surgimed, and Agrawal also alternated contracts for fish food and fish ponds and won a majority of the district’s MCP-funded contracts for those products (Figure 25):

<sup>244</sup> The DMO-provided data indicates that in March 1999 (WBCN 13089), August 1999 (WBCN 12948), October 1999 (WBCN 13163), and January 2000 (WBCN 12934) Surgimed quoted a slide box unit price of INR 70, while Agrawal quoted a unit price of INR 119. Surgimed won all these contracts. However, in August 2001 (WBCN 12992), October 2003 (WBCN 13017), and February 2005 (WBCN 13130), Agrawal quoted a new unit price of INR 112, while Surgimed quoted a unit price of INR 126. These prices are 60 percent and 80 percent higher, respectively, than the firms’ earlier unit prices for the very same equipment. Mediequip’s prices followed a similar pattern.

**Figure 25. Bid Prices for the Procurement of Fish Food and Fish Ponds in Nagpur, 1999–2005**



Note: Circled areas are fish pond contracts; the rest are fish food contracts.

Source: DMO procurement data.

Further, in addition to identifying rotation patterns over time per good, the DIR also identified bid rotation across goods within two tenders. First, on February 1, 2005, the DMO awarded four contracts for four different items to the four firms; each firm won one contract. Second, on May 18, 2005, the DMO awarded six contracts for six different items to the four firms, with Surgimed and Mediequip each winning two contracts and Advance and Agrawal each winning one contract. Tables 18 and 19 show the tenders' results.

**Table 18. Contract Winners in February 1, 2005, Nagpur Tender**

WBCN	Item	Contractor
12953	Glass Slides	Mediequip
13088	Plastic Bags	Advance Surgical & Scientific
13103	Fish Food	Surgimed
13130	Slide boxes	Agrawal

Source: DMO procurement data.

**Table 19. Contract Winners in May 18, 2005, Nagpur Tender**

WBCN	Item	Contractor
13003	Filter Paper	Advance Surgical & Scientific
12914	Lens Cleaning Bag	Agrawal
12993	Enamel Bowl	Surgimed
13012	Beaker 250 ml	Surgimed
13083	Beaker 100 ml	Mediequip
13151	Beaker 500 ml	Mediequip

Source: DMO procurement data.

### *3. Companies Submitted Bids Close to, or Identical to, the Bid Cost Estimate*

In 11 of the 50 contracts reviewed by the DIR, the final contract amount varied less than one percent from the DMO-determined bid cost estimate. In eight of these 11 cases, the contract price exactly matched the bid cost estimate. Winning bids with prices so close to the bid cost estimate are an indicator that the procuring body improperly leaked the bid cost estimate, often to preferred bidders.

Of the eight contracts exactly matching the bid cost estimate, Surgimed won four, Mediequip won three, and Agrawal won one. Table 20 shows the results of the 11 procurements.

**Table 20. Comparison of Variance Between Contract Award and Bid Cost Estimate for Local Contracts in Nagpur (prices in INR)**

WBCN	Date	Amount	Contractor	Estimate	Variance
12934	Jan. 20, 2000	29,750	Surgimed Enterprises	29,750	0%
12991	Jan. 20, 2000	29,925	Surgimed Enterprises	N/A	N/A
13002	May 5, 2001	20,790	Mediequip Enterprises	20,790	0%
13017	Oct. 15, 2003	28,000	Agrawal Scientific	28,000	0%
13068	Apr. 6, 2004	29,000	Mediequip Enterprises	29,000	0%
13076	Mar. 16, 2000	29,700	Mediequip Enterprises	30,000	1%
13086	Oct. 3, 1999	25,200	Surgimed Enterprises	25,200	0%
13131	Jan. 10, 2000	29,800	Salasar Enterprises	30,000	0.67%
13135	Feb. 23, 2001	29,700	Mediequip Enterprises	29,700	0%
13163	Oct. 3, 1999	24,500	Surgimed Enterprises	24,500	0%
13192	Mar. 23, 1999	28,350	Surgimed Enterprises	28,350	0%

Source: DMO procurement data.

#### 4. *The Filing System in Nagpur Was Adequate*

Nagpur DMO representatives were able to produce all documents requested by the DIR. The DIR found these documents to be filed in a satisfactory manner, and they could be retrieved with ease. It thus appears that the Nagpur DMO had the capacity to properly file and maintain procurement documentation.

#### 5. *Summary and Post-Review*

As noted above, 64 percent (by number) of the DIR-reviewed Nagpur local contracts exhibited indicators of fraud or corruption, affecting 72.7 percent of the value of the reviewed Nagpur local contracts. This demonstrates significant procurement problems affecting a set of tenders that the Bank neither supervised nor reviewed. Table 21 summarizes the frequency of the indicators that the DIR observed.

**Table 21. Number of Nagpur Local Shopping Contracts Exhibiting Indicators of Fraud or Corruption**

Type of Indicator	Number of Contracts Exhibiting the Indicator
Bidder receives overwhelming majority of contracts it applies for	30
Winning bid close to estimate	11
Rotation of winning bidders	7
Separate bidders, same address	9
Incorrect method of procurement	5
Inappropriately low number of bidders	3
Endemic record keeping failures—missing docs (e.g., BER)	3
Tampering of documents (e.g., bids, BER) to favor specific bidder(s)	2

Based on documents made available to the DIR, the Bank did not conduct a post-review of the contracts procured in Nagpur. The Bank was, therefore, unaware of the indicators of fraud identified by the DIR.

#### **D. Nasik**

Twenty-three of the 51 Nasik local contracts reviewed (or 45 percent) by the DIR representing 50 percent of the contracts' total values exhibited indicators of fraud or corruption.<sup>245</sup>

<sup>245</sup> Contracts exhibiting indicators totaled INR 465,950 (USD 10,354), or 50 percent, of the total value of local contracts reviewed.

1. *The DMO Improperly Sole-Sourced Goods Contracts throughout the Project*

The DIR identified 23 instances in which the DMO improperly utilized direct contracting despite initially informing the DIR that the contracts were procured through local shopping procedures. The total value of these contracts—INR 381,292 (USD 8,473)—constituted 46 percent of the value of the 65 local shopping contracts, and 12.5 percent of the value of the directly awarded contracts, issued by the Nasik DMO.<sup>246</sup>

Of particular importance is the improper procurement of two contracts: WBCN 13463, an INR 104,000 (USD 2,311) contract for the procurement of IEC oil paintings painted at the local/village level; and WBCN 13556, an INR 198,324 (USD 4,407) contract for the printing of forms.<sup>247</sup> These contracts are important because, combined, they represented a significant portion of the MCP funds spent in Nasik: their combined value of INR 302,324 (USD 6,718) was 38 percent of the value of the 51 contracts reviewed by the DIR and 37 percent of the total value of all local shopping contracts issued in Nasik.<sup>248</sup> When asked to explain their decision to improperly directly contract these two tenders, DMO staff members were unable to explain the first contract and defended the second by saying only that the direct contracting was justified because the recipient was a state-owned enterprise.

In addition to these contracts, the DIR found that, in 10 cases, direct contracting was used to procure goods such as steel cupboards and bags and to conduct IEC activities. The DMO also used direct contracting for vehicle maintenance on 12 occasions for a total amount of INR 39,709 (USD 882). Six of these 12 expenditures were for amounts above the DMO's stated direct contracting limit and ranged in price from INR 2,000 to over INR 8,000.

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<sup>246</sup> The total value of the contracts reviewed by the DIR was INR 778,997, and the total value of all local shopping contracts in Nasik was INR 827,397. The Nasik DMO awarded 103 contracts through direct contracting worth INR 3,039,884. These calculations do not include the two contracts, WBCNs 13463 and 13556, discussed in the next paragraph. Including these two contracts, the total value of contracts that were procured by direct contracting (instead of local shopping) is INR 683,616 (USD 15,191), equal to 83 percent of the value of all 65 local shopping contracts issued by the Nasik DMO.

<sup>247</sup> The contractor for WBCN 13463 was not identified in the DMO's procurement documents. WBCN 13556 was awarded to the Directorate of Government Printing and Stationery, a state-owned enterprise.

<sup>248</sup> This calculation includes the value of the two contracts in the count of 51. However, these two contracts were procured through direct contracting. Therefore, the value of the remaining 49 local shopping contracts is INR 476,673 (USD 10,593). The value of WBCNs 13463 and 13556—INR 302,324 (USD 6,718)—is equal to 63.4 percent of the value of all 49 local shopping contracts reviewed.

## 2. *Bidders with Identical Phone Numbers and/or Addresses Competed for the Same Contracts*

The DIR identified three sets of instances, affecting 16 contracts, in which firms sharing the same phone number and/or address competed against each other for the same contracts. This is an indicator of possible collusion among the firms, which bid to create the appearance of competition. The three instances were as follows:

- In nine contracts, two out of three competing firms—Manoj Trading and Tushar Sales—shared the same address.<sup>249</sup> The nine contracts were worth INR 147,918 (USD 3,287), which was 19 percent of the total value of Nasik’s local shopping contracts. Manoj Trading won six of these contracts, while Tushar won one of them.
- In six other contracts, two bidders—Sigma Enterprises and Unique Enterprises—shared the same phone number.<sup>250</sup> Sigma won all six contracts, which were worth a total of INR 42,433 (USD 943).
- In another contract, two companies—Raj Art and Jadhav Rubber Stamp—that shared the same phone number and address bid against only one other firm, and Raj Art won the contract.<sup>251</sup>

## 3. *Competing Bids’ Language and Presentation Exhibited Strong Textual Similarities*

In 10 out of 51 contracts, multiple firms’ price quotation documents exhibited strong textual similarities that indicate possible collusion among the firms when preparing their bids. The total value of these contracts was INR 88,885 (USD 1,975), equal to 11.4 percent of the value of the 51 contracts reviewed. Examples of similarities between the quotations were:

- For contract WBCN 13509, two firms—Shree Printers and Praful Arts—submitted bid quotations with identical formats, layouts, language, and punctuation.<sup>252</sup>

<sup>249</sup> The third bidder on these contracts was Mahavir Medical, which won two contracts. The nine contracts were for a range of goods, including guppy fish plastic bags (WBCN 11767), latrine pipe nylon caps (WBCN 11780), micro slides (WBCN 13441), rope with nets (WBCN 11822), potassium dichromate (WBCN 11657), and plastic buckets (WBCN 11664).

<sup>250</sup> Sigma bid on contracts WBCN 13536, 13603, 13498, 13445, 13566, and 13499. Trimurti Sales Corporation also bid for all of these contracts.

<sup>251</sup> Contract WBCN 13542.

<sup>252</sup> For example, the two firms’ price quotation layouts share the following features: “Quotation” is written in the top line, centered, above the company name; the company’s name is centered in the second line; and the third line contains the following script: “All types of Offset and Screen Printing.” Both quotations begin with, “Dear Sir,

- For contracts WBCN 13472, 13577, and 13535, two firms—Sai’s and Firozee’s—submitted bid quotations with the same format, font, and punctuation at the bottom of the quotation.<sup>253</sup> In addition, two other firms—Sharada Enterprises and Bright Printers—submitted quotations that were handwritten (in Marathi) in a hand-drawn table that contained the same language, format, and punctuation as Firozee’s bid quotation.<sup>254</sup>
- For contracts WBCN 13589 and 13450, the winning bidder—Boon—submitted its quotation on a pre-printed form that was completed by hand in English. The quotations of the two losing bidders, Dream IT Solutions and Reva solutions, were submitted on photocopies that: (1) appear to have been generated by the same photocopy machine because they exhibit matching printing errors (*i.e.*, a section on the right side of the page that did not print properly); and (2) were submitted in envelopes of the same make and cream white color as Boon’s form.
- For contract WBCN 13481, two firms—Parakh Appliances and Parakh Enterprises—submitted bid quotations with multiple similarities, including identical format, identical language, and neighboring addresses on the same street.<sup>255</sup>

#### 4. *Competing Firms’ Bid Price Quotations Increased by Equal Amounts*

The DIR observed five instances in which bidders’ prices appeared to be related by a common formula. The five contracts exhibiting this indicator had a total value of INR 44,458 (USD 988), which was equal to 5.7 percent of the total value of all Nasik local shopping contracts. The contracts are as follows:

- On contract, WBCN 13548, the bidders’ per-unit price quotations differed by exactly INR 20 each. Uday Arts bid INR 240 per item; Mangesh Art bid INR 260; and Brashman bid INR 280.

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As per your esteemed enquiry, we are quoting our lowest for the same as follows [space]:”. The punctuation and spacing of the two quotations are identical, with the only difference being that Shree wrote its name in italics. The two firms’ addresses also are on the same street, with only slightly different numbers.

<sup>253</sup> For example, both firms’ quotations included the text “Receiver’s Sign.” and “Authorized Sign.”

<sup>254</sup> For example, its bid also included the text “Receiver’s Sign.” and “Authorized Sign.”

<sup>255</sup> Parakh Appliances’ quotation used a pre-printed quotation form and a printed envelope. Parakh Enterprises’ quotation, which appears to have been created on a word processor, replicates the format and the language of Parakh Appliances’ quotation. For example, both quotation forms have the following sentence written above a table of the firm’s prices: “We are pleased to quote our most competitive rates as follows.” Further, the envelope in which Parakh Appliances submitted its bid stated three addresses; the second was 26, Sarda Sankul, M.G., which appears to be one building over from Parakh Enterprises’ 25, Sarda Sankul, M.G. address.

- On contract WBCN 13509, three bidders' per-unit price quotations differed by exactly INR 300 each. Prafulla Arts bid INR 2,400 per item; Ganesh Enterprises bid INR 2,700; and Shri Printers bid INR 3,000.
- On contract WBCN 13472, the bidders' per-unit price quotations differed by exactly INR 20 each. Firozee bid INR 170 per item; Sharadha bid INR 190; and Bright bid INR 210.
- On contract WBCN 13450, the bidders' per-unit price quotations differed by exactly INR 100 each. Boon Enterprises bid INR 4,800 per item; Reva Solution bid INR 4,900; and Media Shopee bid INR 5,000. All three quotations also stated the same price for a motherboard component, with other item prices increasing in INR 50 increments.
- On contract WBCN 13441, the bidders' per-unit price quotations differed by INR 1 each. Manoj bid INR 38.50 per item; Mahavir bid INR 39.50; and Tushar bid INR 40.50.

#### *5. The Filing System in Nasik Was Adequate*

Nasik DMO representatives were able to produce all documents requested by the DIR. The DIR found these documents to be filed in a satisfactory manner, and documents—including requests for quotations, quotations, evaluation sheets, and purchase orders—could be retrieved with ease. It thus appears that the Nasik DMO had the capacity to properly file and maintain procurement documentation.

#### *6. Summary and Post-Review*

As noted above, 45 percent (by number) of the DIR-reviewed Nasik local contracts exhibited indicators of fraud or corruption, affecting 50.3 percent of the value of the reviewed Nasik local contracts. As in Nagpur, this demonstrates significant procurement problems affecting a set of tenders that the Bank neither supervised nor reviewed. Table 22 summarizes the frequency of the indicators that the DIR observed.

**Table 22. Number of Nasik Local Shopping Contracts Exhibiting Indicators of Fraud or Corruption in Nasik**

Type of Indicator	Number of Contracts Exhibiting the Indicator
Separate bidders identical phone number in same contract	11
Strong similarities between competing bids' language/presentation	10
Separate bidders same address	8
The unit rate of bidders are related to a common formula	5
Incorrect method of procurement	2

Based on documents made available to the DIR, it appears that the Bank's procurement post-review examined only one contract in Nasik.<sup>256</sup> The DIR identified indicators of fraud that were not observed by the procurement post-review.

## Project Reports and Assessments

The Bank attempts to promote project effectiveness and safeguard projects from abuse through supervision and assessment of project implementation. To assess the effectiveness of this mechanism, the DIR reviewed the project's reports and assessments and analyzed: (1) whether they found issues similar to the ones identified by the DIR; and (2) how the Bank addressed these. The DIR also reviewed how the Bank addressed complaints filed regarding the MCP, because such complaints often provide strong indicators of problems with aspects of the project.

<sup>256</sup> WBCN 13548.

## Supervision Documents

### A. Audit Reports

The MCP Credit Agreement required annual audits of the project's finances.<sup>257</sup> The DIR received 86 MCP audit reports, including:<sup>258</sup>

- Yearly Revolving Fund Special Account Audit Certificates, which opine whether “withdrawals from [the] Special Account were in accordance with the provisions of the ... loan agreement and [whether the] special account statement ... gives a true and fair view of the special account”;<sup>259</sup>
- Yearly Audit Certificates and Inspection reports prepared by the Office of the Director General of Audit, which opine whether “the expenditure statement/financial statements read with the observations [contained therein] represent a true and fair view of the implementation (and operation) of the Project for the year”;<sup>260</sup>
- Yearly Audit Reports, Related Opinions, and Utilization Certificates, conducted by external auditors, on state consolidated financial statements and opine, in part, on whether expenditures were project-related and incurred in accordance with applicable rules;<sup>261</sup> and
- Yearly Audit Reports, Related Opinions, and Utilization Certificates, conducted by external auditors, on district financial statements and opine, in part, on whether expenditures were project-related and incurred in accordance with applicable rules.<sup>262</sup>

In its review of MCP audit reports, the DIR identified more than 50 instances of stated weaknesses in internal project financial controls, which facilitate fraud and corruption by permitting inappropriate or incomplete accounting entries that can hide misappropriation of funds. The audit reports also note more than 20 specific indicators of possible fraud and corruption—such as bid tampering, contract

<sup>257</sup> MCP Credit Agreement, sec. 4.01.

<sup>258</sup> The DIR was provided only five external audits by independent auditors of national, state, or district project finances. Prior to 2003–2004, state audit reports were not required to be sent to the Bank, but instead were sent to the Malaria Project Directorate and reviewed by the CAG as part of its overall project audit. Consequently, the first state- and district-level audit provided to the DIR was for the project year ending March 31, 2004—five years after the project began. G.N.V. Ramana, Senior Public Health Specialist, letter to C.S. Aggarwal re: Malaria Control Project (Credit 2964-IN) Audit Certificate for 2003–2004 (excluding the Ministry of Health and Family Welfare), p. 1 (Aug. 31, 2005).

<sup>259</sup> 2005–2006 Revolving Fund Special Accounts Audit Certificate, pp. 3–4 (Oct. 16, 2006).

<sup>260</sup> 2004–2005 Audit Certificate for the Enhanced Malaria Control Programme, p. 9 (undated).

<sup>261</sup> See, e.g., Utilization Certificate for State Malaria Control Society Gujarat, p. 2 (Dec. 16, 2004).

<sup>262</sup> See, e.g., Utilization Certificate for District Malaria Control Society Bilaspur, p. 2 (Dec. 16, 2004).

splitting, and possible collusion—which are consistent with those identified by the DIR’s MCP procurement reviews.

The MCP audit reports provided the Bank with information about many possible problems with the MCP’s implementation, although they do not indicate the pervasiveness of these problems. Yet despite the identification of these problems, the Bank’s supervision documents—such as implementation status reports and project status reports—did not appear to address these issues or modify the project’s performance ratings because of them.

To its credit, correspondence provided to the DIR indicates that the Bank’s task team was proactive in obtaining and reviewing these audit reports, and in an April 2006 letter the Task Team Leader told the Joint Director of the National Vector Borne Disease Control Program that, “The internal control framework needs considerable strengthening in all states.”<sup>263</sup> While correspondence provided by the Task Team did evidence the fact that certain issues, such as the audit failure in Orissa and the fraud in Koraput,<sup>264</sup> were being addressed, the documents provided to the DIR were insufficient to determine whether the Task Team systematically addressed the many problems noted by the audits.

The MCP audit reports noted the following indicators of fraud that corroborate and expand upon the DIR’s findings:

### 1. *Internal Control Weaknesses*

The most frequent internal control weakness was the lack of reconciliation of project accounting records, which makes fraudulent transactions harder to identify by making the movement of project funds more difficult to follow. The DIR-reviewed audit reports noted more than 20 of these reconciliation failures, including failures to confirm: (1) whether advanced funds were spent; (2) whether project financial statements match the Statement of Expenditures submitted to the Bank; and (3) whether the project’s financial records reconciled with its bank accounts. These problems occurred in, among other states, Chhattisgarh, Madhya Pradesh, Maharashtra, Orissa, and Rajasthan.<sup>265</sup>

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<sup>263</sup> G.N.V. Ramana, Task Team Leader, letter to P.L. Joshi, Joint Director, NVBDCP, p. 1 (Apr. 27, 2006) (quotation). See also, e.g., M. Carter letter to R. Bannerji (Nov. 2, 2003); M. Carter letter to R. Bannerji (Nov. 8, 2004); G.N.V. Ramana letter to C.S. Aggarwal, (Aug. 31, 2005); G.N.V. Ramana letter to P.L. Joshi (Apr. 27, 2006).

<sup>264</sup> Letter from Arun Baroka, Director MOHFW, to G.N.V. Ramana (Oct. 1, 2007).

<sup>265</sup> See, e.g., 2005–2006 Audit Report, Chhattisgarh, p. 2 (Mar. 11, 2007); Management Letter, relating to 2003–2004 Audit Report, SMCS Maharashtra, p. 1 (Nov. 24, 2004); 2005–2006 Audit Report, Madhya Pradesh, p. 5 (Sep. 5, 2006); 2003–2004 Audit Report, SMCS/DMCS Orissa, p. 1 (Jan. 17, 2005); G.N.V. Ramana letter to P.L. Joshi, p. 5 (Jan. 24, 2007) (lack of reconciliation of advances in Rajasthan); 2003–2004 Audit Report of the Enhanced Malaria Control Project, pp. 7 and 9 (Nov. 30, 2004).

The audit reports noted at least 18 instances of incomplete or missing documentation, such as missing bills, receipts, or other evidence of payment.<sup>266</sup> In nine other cases, audit reports noted cash-handling problems such as payments above approved limits, failure to record transactions, or lump-sum withdrawals for payment of specific invoices.<sup>267</sup> And 10 audit reports, principally regarding districts in Maharashtra, noted that physical verification of assets was not performed.<sup>268</sup> All of these problems can hide inappropriate expenditures or the misappropriation of project physical assets.

Noteworthy, auditors in Orissa were unable to express any opinion on the financial statements of almost 50 percent of the state's districts in 2003–2004, and 24 percent of its districts in 2004–2005, because of a range of problems—from inability to create trial balances to failure to maintain ledgers—that created a lack of sufficient auditable records.<sup>269</sup> The auditor's inability to render any opinion on a district's finances indicates a complete breakdown of the districts' accounting systems. The DIR notes that the Bank is currently in the process of evaluating whether or not to seek reimbursement from the Government of India for expenditures incurred in Orissa districts during the period 2005–2006.<sup>270</sup>

## 2. *Indicators of Possible Fraud and Corruption*

The bulk of the audit reports' fraud indicators regarded internal control weaknesses. Because the DIR did not analyze project financial records, these indicators expand upon and supplement the DIR's findings. But the Government of India and state auditors also noticed specific indicators of fraud and corruption which overlapped with the DIR's findings, including the following:

<sup>266</sup> See, e.g., 2005–2006 Audit Report, Khandwa Madhya Pradesh, p. 6 (Sep. 5, 2006); Audit Report of Chhattisgarh State for the Financial Year 2005–2006, p. 2 (Mar. 1, 2007); G.N.V. Ramana letter to P.L. Joshi re: Malaria Control Project Audit Certificate 2004–2005 – for 7 States, p. 1 (Apr. 27, 2006) (noting problems in Orissa); Management Letter re: 2004–2005 Audit of Dhule District Society, p. 2 (Oct. 19, 2005); Management Letter re: 2004–2005 Audit of Gadchiroli District Society, p. 1 (Oct. 19, 2005); 2004–2005 Audit Report of Orissa State, Mayurbhanj District, p. 5 (Mar 21, 2006).

<sup>267</sup> See, e.g., Audit Report (Consolidated) for the Financial Year 2003–2004 of Madhya Pradesh State, pp. 10 and 14 (Nov. 30, 2004); Audit of DMCS for the Year 2004–2005 (Orissa), p. 3 (Dec. 21, 2005); 2005–2006 Audit Report, Gondiya, p. 3 (Jul. 17, 2006); 2003–2004 Audit of Madhya Pradesh State, p. 12 (Nov. 30, 2004); 2004–2005 Audit of Nasik District, p. 3 (Oct. 19, 2005).

<sup>268</sup> See, e.g., 2004–2005 Audit of Raigad, p. 3 (Oct. 19, 2005); 2004–2005 Audit of Nanded, p. 3 (Oct. 19, 2005); 2004–2005 Audit of Amravati, p. 3 (Oct. 19, 2005); 2004–2005 audit of Chandrapur, p. 3 (Oct. 19, 2005); 2004–2005 audit of Dhule, p. 3 (Oct. 19, 2005); 2004–2005 Audit of Thane, p. 3 (Oct. 19, 2005); 2004–2005 Audit of Jalgaon, p. 3 (Oct. 19, 2005); 2004–2005 Audit of Maharashtra, p. 2 (Oct. 19, 2005); 2005–2006 Audit of Chhattisgarh, p. 3 (Mar. 12, 2007).

<sup>269</sup> In 2003–2004, the auditor did not provide an opinion for Balasore, Bolangir, Dhenkanal, Ganjam, Jaipur, Kalahandi, Kandhamal, Koraput, Malkangiri, and Nuapada. 2003–2004 Audit report, SMCS/DMCS Orissa, p. 1 (Jan. 17, 2005). In 2004–2005, the auditor did not provide an opinion for Angul, Dhenkanal, Koraput, Malkangiri, and Mayurbhanj. 2004–2005 Audit Report, SMCS/DMCS Orissa, p. 1 (Mar. 21, 2006).

<sup>270</sup> G.N.V. Ramana, Task Team Leader, letter to P.L. Joshi, Director NVBDCP, p. 2 (May 9, 2007). See also G.N.V. Ramana, Task Team Leader, letter to G.P.S. Dhillon, Project Director NVBDCP, p. 2 (Jun. 20, 2007).

- *Lack of Competitive Bidding.* Audit reports stated that, in seven districts in Maharashtra, contracts were bid by seeking quotations from one or only a few firms.<sup>271</sup>
- *Contract Splitting.* Audit reports stated that, in 11 districts in Maharashtra and two in Orissa, contract orders were split to avoid procurement bidding requirements.<sup>272</sup>
- *Bid Tampering.* The 2005–2006 Audit Reports for the Gadchiroli, Gondiya, and Nandurbar districts of Maharashtra stated that bid prices were manipulated to favor certain bidders.<sup>273</sup>
- *Possible Falsified Bids.* The 2005–2006 Audit Report for the Dhule district of Maharashtra noted two cases where losing bidders that were not authorized dealers of the procured goods submitted bids with matching fonts that were not printed on firm letterhead.<sup>274</sup>
- *Competing Firms with Matching Contact Information.* The 2005–2006 audit reports for the Bhandara and Gondiya districts of Maharashtra noted five instances in which bidders competing for the same tender were related firms with matching contact information.<sup>275</sup>
- *Possible Misappropriation of Project Funds.* The 2004–2005 audit report for the Koraput district of Orissa noted that local project officials took out an INR 500,000 loan on the same day when the project’s accounts contained an INR 495,453 balance; the auditors concluded that “this phenomena [*sic*] strengthens the indication of [the] non-existence of physical cash

<sup>271</sup> 2004–2005 Audit of MCP-Raigad Maharashtra, p. 2 (Oct. 19, 2005); 2004–2005 audit of MCP-Nanded Maharashtra, p. 3 (Oct. 19, 2005); 2004–2005 audit of MCP-Thane Maharashtra, p. 2 (Oct. 19, 2005); 2004–2005 audit of MCP-Gadchiroli Maharashtra, p. 3 (Oct. 19, 2005); 2005–2006 Audit Report, Thane Maharashtra, p. 3 (Aug. 3, 2006); 2004–2005 Audit Report, MCP-Dhule Maharashtra, p. 2 (Oct. 19, 2005); 2004–2005 Audit Report, MCP-Gondiya Maharashtra, p. 2 (Oct. 19, 2005); 2004–2005 audit of MCP-Chandrapur Maharashtra, p. 2 (Oct. 19, 2005).

<sup>272</sup> 2004–2005 Audit of MCP-Thane Maharashtra, p. 2 (Oct. 19, 2005); 2004–2005 Audit of MCP-Jalgaon Maharashtra, p. 3 (Oct. 19, 2005); 2005–2006 Audit Report, Raigad-Pune, p. 4 (Aug. 2, 2006); 2005–2006 Audit Report, Thane-Pune, p. 4 (Aug. 3, 2006); 2005–2006 Audit Report, Jalgaon, p. 3 (Jul. 22, 2006); 2005–2006 Audit Report, Akola, p. 3 (Jul. 19, 2006); 2005–2006 Audit Report, Pune, p. 3 (Aug. 4, 2006); 2005–2006 Audit Report, Nanded, p. 4 (Jul. 26, 2006); 2005–2006 Audit Report, Bhandara, p. 3 (Jul. 17, 2006); 2005–2006 Audit Report, Chandrapur, p. 3 (Jul. 18, 2006); 2005–2006 Audit Report, Gadchiroli, p. 4 (Jul. 18, 2006); 2005–2006 Audit Report, Nagpur, p. 3 (Jul. 20, 2006); 2005–2006 Audit Report, Sundergarh Orissa, p. 4 (Mar. 21, 2006); 2004–2005 Audit Report, Kandhamal Orissa, p. 2 (Sep. 28, 2005).

<sup>273</sup> 2005–2006 Audit Report, Gadchiroli, p. 3 (Jul. 18, 2006); 2005–2006 Audit Report, Gondiya, p. 4 (Jul. 17, 2006); 2005–2006 Audit Report, Nandurbar, p. 3 (Jul. 21, 2006).

<sup>274</sup> 2005–2006 Audit Report, Dhule, pp. 3–4 (Jul. 21, 2006).

<sup>275</sup> 2005–2006 Audit Report, Bhandara, pp. 3–4 (Jul. 17, 2006); 2005–2006 Audit Report, Gondiya, pp. 3–4 (Jul. 17, 2006).

and its misappropriation.”<sup>276</sup> Similarly, the 2004–2005 audit report for the Nawrangpur district of Orissa stated that INR 497,740 that had been booked as a project expense actually was transferred to a bank account in the name of “Zss-Social Marketing, MMN, Nawrangpur.”<sup>277</sup> It is unclear whether this was a legitimate transaction.

- *Possible Manipulation of Project Accounts.* The 2005–2006 Madhya Pradesh audit report stated that a District Malaria Control Society’s office cash book contained “too much overwriting and use of whitener, which is against the principles of bookkeeping and may lead to manipulation in the accounts.”<sup>278</sup>
- *Improper Expenditures.* The 2004–2005 audit report for the Koraput district of Orissa noted that INR 100,167 was spent on vehicles unrelated to the MCP.<sup>279</sup> It is unclear whether the Bank was reimbursed for these funds.
- *Possibly Fraudulent Payments to Contractors.* The 2004–2005 audit reports of 11 districts in Orissa note that payments to sprayer laborers were of “doubtful nature” because they were not properly documented, approved, and were “accepted” by the contractors before payment was made.<sup>280</sup> A Bank procurement post-review in Orissa identified the same issue as a possible problem.<sup>281</sup>
- *Contractor Payment without Acceptance Certificates.* The Government of India’s 2003–2004 MCP audit report stated that the National Vector Borne Disease Control Program had directed RITES to release final 10 percent payment on a range of contracts even though project officials had not issued goods acceptance certificates for those goods.<sup>282</sup>

<sup>276</sup> 2004–2005 Audit Report, DMCS-Koraput, Orissa, pp. 1–2 (Mar. 21, 2006).

<sup>277</sup> 2004–2005 Audit Report of Nawrangpur, Orissa, p. 2 (Oct. 5, 2005).

<sup>278</sup> 2005–2006 Audit Report Madhya Pradesh, p. 7 (Sep. 5, 2006).

<sup>279</sup> 2004–2005 Audit Report of Koraput, Orissa, p. 2 (Dec. 21, 2006).

<sup>280</sup> 2004–2005 Audit Report of Bargarh, Orissa (Mar. 21, 2006); 2005–2006 Audit Report of Khandwa Bhopal, p. 6 (Sept. 5, 2006); 2005–2006 Audit Report for Bolangir District, p. 2 (Nov. 23, 2005); 2004–2005 Audit Report, Deogarh, p. 2 (Oct. 26, 2005); 2004–2005 Audit Report, Gajapati, p. 1 (Dec. 21, 2005); 2004–2005 Audit Report, Kalahandi, p. 2 (Sept. 28, 2005); 2004–2005 Audit Report, Keonjhar, pp. 1–2 (Sept. 21, 2005); 2004–2005 Audit Report, Nawrangpur, p. 1 (Sept. 28, 2005); 2004–2005 Audit Report, Nuapada, p. 2 (Oct. 19, 2005); 2004–2005 Audit Report of Koraput, Orissa, p. 2 (Dec. 21, 2005); 2004–2005 Audit report of Mayurbanj, Orissa, p. 1 (Nov. 9, 2005).

<sup>281</sup> Procurement Post Award Review, Malaria Control Project, Orissa, p. 6 (Apr. 24, 2006).

<sup>282</sup> Office of Director-General of Audit, 2003–2004 Audit of the Enhanced Malaria Control Project, p. 5 (Nov 30, 2004).

## B. Procurement Post-Reviews

The Bank conducts procurement post-reviews to: (1) verify the procurement and contracting procedures; (2) verify technical compliance and physical completion; (3) review contract management issues; (4) determine whether adequate procurement, planning, implementation, and monitoring systems are in place; and (5) identify remedies to correct any noted deficiencies.<sup>283</sup> To assess whether the Bank's MCP post-reviews captured the procurement problems identified by the DIR, the DIR reviewed six procurement post-review reports for 88 MCP tenders performed in Andhra Pradesh, Chhattisgarh, Jharkhand, Maharashtra, Madhya Pradesh, and Orissa.<sup>284</sup>

### 1. Indicators of Possible Fraud and Corruption

With only one exception, the post-reviews did not use a contract selection methodology designed to obtain a representative sample of contracts to review.<sup>285</sup> This may limit the reviews' ability to identify patterns of procurement problems. Despite this limitation, the post-reviews identified some of the same issues found by the DIR—including improper sole-sourcing of contracts, contract splitting, and unapproved tender document modifications—though they did not identify the many indicators of possible collusive rings among bidding firms. The post-reviews' findings included the following:

- *Use of Improper Procurement Methods.* The post-reviews identified 12 tenders, affecting contracts worth INR 4,160,775, in which procurements were sole-sourced rather than procured through national shopping.<sup>286</sup> This corroborates the DIR's finding of this practice in local MCP contracting.
- *Improper Bid Solicitations.* The post-reviews identified 19 tenders in Andhra Pradesh, Jharkhand, and Madhya Pradesh, affecting contracts worth INR 4,426,607, in which bids were solicited verbally rather than by letter.<sup>287</sup> This practice violated the Bank's *Procurement Guidelines* and

<sup>283</sup> A. Arauo, OCPCPR, Memo re: Procurement Post Reviews and Independent Procurement reviews: Processes and Procedures, p. 3 (Jul. 19, 2001).

<sup>284</sup> These six reports were the only post-review reports contained in IRIS.

<sup>285</sup> The one exception to this trend was the post-review in Jharkhand. See Procurement Post Award Review, Jharkhand, Malaria Control Project, p. 2 (undated).

<sup>286</sup> Maharashtra Review (IDA Cr. No. 2964-IN Malaria Control ), p. 6 (undated); Procurement Post Award Review, Malaria Control Project, Jharkhand, pp. 3–4, 12, 19, and 20 (undated); Procurement Post Award Review, Malaria Control Project, Andhra Pradesh, pp. 5–6 and 11–14 (Mar. 11, 2006); Procurement Post Review Supervision Mission Report, M P State Malaria Control Project & Immunisation Strengthening Project, Madhya Pradesh, pp. 17–18 and 20 (Mar. 17, 2006).

<sup>287</sup> Procurement Post Award Review, Jharkhand, Malaria Control Project, pp. 3, 8–11, 13, and 15–18; Procurement Post Award Review, Malaria Control Project, Andhra Pradesh, pp. 5 and 8–15 (Mar. 11, 2006).

risked permitting the procuring agency to notify (and thus prefer) only certain firms.<sup>288</sup> Further, in five of nine contracts reviewed in Chhattisgarh (worth INR 6,257,000 in total), the bid documents omitted critical information such as quantities and delivery dates.<sup>289</sup> This practice could permit the procuring agency to inform preferred firms of the missing information and thus ensure that only those firms' bids are responsive.

- *Orders Placed Prior to Bidder Selection.* In three of the nine contracts reviewed in Chhattisgarh (worth a total of INR 3,915,000), the post-review noted that orders were placed with an eventual winning bidder *before* that firm had been selected to receive the contract.<sup>290</sup> This practice suggests that the winning firm was pre-selected by the procuring agency.
- *Bids Submitted Prior to Solicitation.* In two contracts in Maharashtra, worth a total of INR 54,060, the post-review noted that bids were received before the procuring agency issued the solicitation letter.<sup>291</sup> This suggests that the procuring agency contacted preferred firms in advance and possibly informed those firms of the bidding requirements.
- *Insufficient Time to Bid.* In seven contracts in Andhra Pradesh, worth a total of INR 135,785, the post-review observed that the procuring agency gave bidders only one to three days to respond to a bid solicitation.<sup>292</sup> Procuring agencies can use such short time frames to steer contracts to preferred firms by informing those firms of bidding requirements in advance, thus ensuring that those firms submit responsive bids while other firms have insufficient time to prepare their bids.
- *Contract Splitting.* The Chhattisgarh post-review report noted one instance in which a tender was split into two contracts of INR 1,440,000 to avoid procurement threshold limits.<sup>293</sup> The DIR also noted three other contracts in the post review that were awarded on the same day for identical amounts of INR 1,305,000.<sup>294</sup>

<sup>288</sup> Procurement Post Award Review, Jharkhand, Malaria Control Project, p. 3 (undated) (noting violation of *Procurement Guidelines* para. 3.5).

<sup>289</sup> Procurement Post Review Supervision Mission Report, Malaria Control Project, Chhattisgarh, pp. 2 and 5–9 (Mar. 29, 2006).

<sup>290</sup> Procurement Post Review Supervision Mission Report, Malaria Control Project, Chhattisgarh, pp. 10–12 (Mar. 29, 2006).

<sup>291</sup> Maharashtra Review (IDA Cr. No. 2964-IN Malaria Control), p. 14 (undated).

<sup>292</sup> Procurement Post Award Review, Malaria Control Project, Andhra Pradesh, pp. 5 and 8–14 (Mar. 11, 2006).

<sup>293</sup> Procurement Post Review Supervision Mission Report, Malaria Control Project, Chhattisgarh, pp. 5–6 and 10–12 (Mar. 29, 2006).

<sup>294</sup> *Id.*

- *Unapproved Bid Modifications to Favor a Bidder.* The Jharkhand post-review observed one case in which, contrary to Bank's *Procurement Guidelines*, a bidder was permitted to modify its bid price without Bank approval and thereby win additional contracts on a tender.<sup>295</sup> This practice indicates favoritism of the procuring agency toward that firm.
- *Potential Misappropriation of Assets.* The Chhattisgarh post-review noted that an INR 83,750 computer system was contracted for without a tender; lacked supporting documentation with the same contractor name and date as the contract; and was installed at the local minister's home.<sup>296</sup> The post-reviewer concluded from this information that the contract had been misprocured, and it is unclear whether the Bank obtained repayment for this expenditure.

### C. SOE Financial Reviews

The SAR Financial Management representative provided the DIR with two Statement of Expenditure (SOE) Financial Review reports related to MCP, for the states of Maharashtra and Gujarat. These reviews were performed to verify that claimed expenditures: (1) were used for their intended purpose; (2) were properly supported by adequate documentation; (3) were properly recorded in the accounting records; and (4) were eligible for financing by the bank. Further, the reviews were performed to assess whether the projects had adequate internal control frameworks to support the accurate preparation of SOEs.<sup>297</sup>

While the SOE Financial Review reports did not include any direct references to indicators of potential fraud and corruption, they did include several references to internal control lapses that could have facilitated the occurrence of fraud and corruption. These lapses included failure to perform bank reconciliations, inadequate recordkeeping,<sup>298</sup> advances being claimed as expenditures,<sup>299</sup> and the lack of proper approvals of SOEs submitted to the Bank.<sup>300</sup>

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<sup>295</sup> Procurement Post Award Review, Jharkhand, Malaria Control Project, pp. 4 and 21 (undated).

<sup>296</sup> Procurement Post Review Supervision Mission Report, Malaria Control Project, Chhattisgarh, p. 13 (Mar. 29, 2006).

<sup>297</sup> Statement of Expenditure Financial Review, Maharashtra (Jun. 10, 2005), p. 4–5; Statement of Expenditure Financial Review, Gujarat (May 11, 2005), p. 4–5.

<sup>298</sup> Statement of Expenditure Financial Review, Maharashtra (Jun. 10, 2005), p. 7–8.

<sup>299</sup> *Ibid.*, p. 7.

<sup>300</sup> Statement of Expenditure Financial Review, Gujarat (May 11, 2005), p. 7.

## D. The Implementation Completion Report

### 1. Project Rating

The ICR rated the MCP's implementation and achievement of development objectives as "satisfactory," though its authors expressed their preference for a lower "moderately satisfactory" rating because the project's three-year lag and 63 percent expenditure rate was inefficient.<sup>301</sup>

The ICR concluded that the project achieved its purpose because of "the positive epidemiological trends and the strategic reorientation of the national program for eradication and control."<sup>302</sup> It based this assessment largely upon government-provided epidemiological surveillance data, in particular a statistical analysis reporting a decline in IRS and "impressive" progress in reducing malaria morbidity in project-supported districts over the project period.<sup>303</sup> This is in keeping with the *aides-mémoire*, which evaluated project performance based on statistics like the number of functioning treatment centers, the number of rapid diagnostics kits used, or the number of bed nets procured and distributed.<sup>304</sup> Given the project's development-impact focus, the use of government-provided statistics is not inappropriate. But relying on such statistics without thorough accompanying field inspections can prevent the Bank from assessing project quality and, as a result, the project's likely influence upon those statistics. It also can create evaluation inconsistencies where projects with significant implementation problems still receive satisfactory ratings because those implementation problems are not weighed heavily in overall project evaluation.

### 2. Identification of Implementation Problems

Despite its positive project ratings, the ICR identified two project implementation problem areas, including several of the procurement issues identified by the DIR.

First, the ICR identified the quality of IRS as an issue because it was "highly variable" and "not routinely monitored, which is likely to have reduced significantly its effectiveness in vector control."<sup>305</sup> These problems included insufficient physical implementation: "some state visits during and after the mid-term review revealed

<sup>301</sup> MCP ICR, pp. 5–6. The components of the project were all rated satisfactory, except for epidemic response and intersectoral collaboration, which was rated as moderately satisfactory. MCP ICR, p. 13.

<sup>302</sup> MCP ICR, pp. 5–6.

<sup>303</sup> *Ibid.*, pp. 5–7.

<sup>304</sup> See generally December 2003 and May 2004 *Aides-Mémoires*.

<sup>305</sup> MCP ICR, p. 6.

that many number of houses are sprayed on the outside, which is unlikely to have significant impact on the malaria burden.”<sup>306</sup> The ICR attributed these problems to insufficient quality control supervision, caused in part by the project’s decentralized design.<sup>307</sup> Indeed, the ICR noted concerns about the Borrower’s overall project supervision capacity.<sup>308</sup> The ICR rated the Bank’s performance as satisfactory, and the Bank’s supervision as moderately satisfactory (because of low disbursements at mid term), but rated Bank preparation as unsatisfactory due to poor planning that did not consider Borrower capacity or prepare a sufficient monitoring and evaluation framework.<sup>309</sup> This evaluation appears to forego the possibility of reforming project supervision mid-stream, an aberrant outcome given the Bank’s recognition of the Borrower’s capacity constraints.

Second, the ICR identified multiple significant problems with both procurement and the Bank’s reaction to procurement problems identified during project implementation. These included the following:

- RITES, often with the Bank’s approval, avoided prior-review ICB thresholds by tendering multiple contracts below these thresholds. In one instance the Bank returned draft bid documents to RITES and notified it of the “mistake” of submitting the documents when the individual schedules were for less than USD 300,000 (the total procurement was considerably larger).<sup>310</sup>
- The Bank has a limited capacity to respond to procurement requests and monitor adherence to technical specifications. “Future projects are at severe risk of encountering similar delays if procurement supervision capacity is not improved, perhaps through contracting with a firm or technical agency (like WHO) to provide technical backstopping to Task Team Leaders to assist in clearances and adherence to technical specifications. This could even be done at corporate level, rather than country-by-country.”<sup>311</sup>
- “In general, it does not seem to be the Bank’s procurement procedures themselves that served as an impediment to smooth and timely procurement, but rather adherence to the agreed procedures by the client and pro-

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<sup>306</sup> *Ibid.*, p. 11.

<sup>307</sup> *Ibid.*, p.5.

<sup>308</sup> *Ibid.*, p. 7.

<sup>309</sup> *Ibid.*, pp. 21–22.

<sup>310</sup> *Ibid.*, p. 19.

<sup>311</sup> *Ibid.*, p. 20.

curement agent, which was perhaps compounded by inadequate supervision by the Bank.”<sup>312</sup>

- The ICR noted project delays associated with firms’ difficulties in obtaining required corporate registrations. “Due partly to issues with the inability of one firm to receive CIB registration, the Bank withdrew the funding for Synthetic Pyrethroids and ultimately came to an agreement with the Government of India that all future bidders must be registered with CIB at the time of bid and that future procurements be handled through NCB.”<sup>313</sup>
- The past performance criterion was increased from production of 50 percent of the contract amount of product to 80 percent and five years’ past performance. The ICR also noted, however, that in one procurement, a firm was awarded a contract with only three years’ past performance, in violation of this requirement.<sup>314</sup>

While certainly the identification of these issues is admirable, the fact that they were only first mentioned in the ICR is less helpful. Supervision mission *aides-mémoires* made only vague reference to implementation problems, and did not note the implementation problems identified by the ICR. For example, the *aide-mémoire* of December 8–19, 2003, did not expound on the issue of implementation in Orissa and Jharkhand beyond simply stating, “Jharkhand and Orissa require immediate attention as the project implementation capacities are very weak and National Anti-Malaria Programme (NAMP) and Ministry of Health and Family Welfare should plan to develop a special package of technical and project implementation support.”<sup>315</sup> In contrast, the ICR focused on Orissa because the state was home to nearly 50 percent of India’s total malaria burden.<sup>316</sup> It then made specific implementation observations, such as the specific number of districts with full-time malaria officers (three out of 30); the fact that no vector monitoring work was occurring in the state because there was only one entomologist in the state who worked in the state capital; and the one-third vacancy rate in certain project-sanctioned posts.<sup>317</sup>

The ICR team deserves credit for their specificity and candor, as well as for distinguishing between their sources of data (surveillance data, review of studies and

<sup>312</sup> *Ibid.*, p. 18.

<sup>313</sup> *Ibid.*, p. 19.

<sup>314</sup> *Ibid.*, p. 19.

<sup>315</sup> December 8–19 *Aide-Mémoire*, p. 7.

<sup>316</sup> ICR Field Visit Notes, Dec. 8–11, 2005.

<sup>317</sup> *Ibid.*, pp. 1–2.

reports, or ICR team field visits).<sup>318</sup> The ICR also deserves recognition for suggesting a new focus on output-based supervision that the DIR believes is critical to identifying and deterring fraud and corruption: “With increasing emphasis on link in inputs to results, a significantly strengthened monitoring and surveillance system using information triangulation and independently confirmed results, would provide the program with a greater degree of confidence to target interventions to problem areas and more accurately measure the relative impact of different activities.”<sup>319</sup>

## Complaints Management

At the time of the MCP’s implementation, the applicable *Procurement Guidelines* provided that communications from bidders sent to the Bank would be handled as follows:

- Communications received prior to the bid closing date “will, if appropriate, be referred to the Borrower with the Bank’s comments and advice, for action or response”; and
- Communications received after the bid closing date will: (1) for non-prior-review contracts, “be sent to the Borrower for due consideration and appropriate action, if any, and these will be reviewed during subsequent supervision of the project by Bank staff”; or (2) for prior review contracts, “be examined by the Bank, in consultation with the Borrower. ... The Bank’s review will not be completed until the communication is fully examined and considered.”<sup>320</sup>

The Bank’s current *Procurement Guidelines* contain the same language as the *Guidelines* applicable to the MCP.<sup>321</sup> This language does not distinguish between different types of communications, *e.g.*, inquiries versus complaints.

### A. Sources of Complaints

INT obtained 63 complaints related to the MCP from the following sources (Figure 26):

<sup>318</sup> MCP ICR, p. 5.

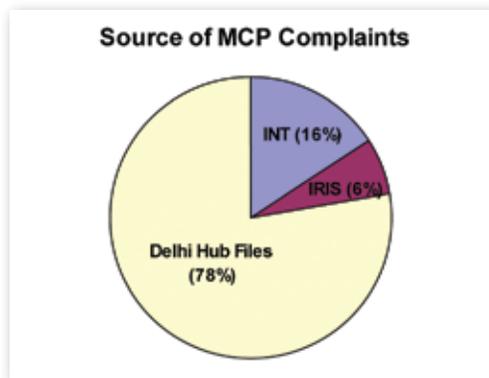
<sup>319</sup> M. Carter, Country Director, letter to P. Hota, Secretary – Health and Family Welfare, re: Implementation Completion Review Mission for the “Enhanced Malaria Control Project,” pp. 1–2 (Feb. 13, 2006).

<sup>320</sup> World Bank, *Guidelines: Procurement under IBRD Loans and IDA Credits*, pp. 49–50 (Jan. and Aug. 1996 Revision). The revised and most recent *Procurement Guidelines* have the same provisions in the “Guidance to Bidders” Appendix.

<sup>321</sup> World Bank, *Guidelines: Procurement under IBRD Loans and IDA Credits*, pp. 58–59 (Oct. 15, 2006 rev.).

- Six complaints (10 percent) were in the INT’s Information Systems (INTIS) database.
- Four complaints (6 percent) were obtained during INT’s investigation of the RCH.
- Four additional complaints (6 percent) were found in the Bank’s Internal Records Information System (IRIS) electronic document database.
- Forty-nine complaints (78 percent) were obtained from project correspondence files maintained by the Bank’s procurement hub in New Delhi.

**Figure 26. Source of MCP Complaints**



## B. INT Receipt of, and Action Upon, Complaints

As noted above, INT only received 10 complaints related to the MCP, which is only 16 percent of the total number of complaints received by the Bank as a whole. Further, INT’s review of the complaints received by the procurement hub indicates 63 percent of the received complaints—31 out of 49—regarded possible fraud and corruption indicating that they likely should have been forwarded to INT.<sup>322</sup> But INT only received seven of these complaints, and INT was unable to identify correspondence in either its or the hub’s files indicating that any of the other 24 complaints were forwarded to INT.<sup>323</sup> It should however, be noted, that INT, formerly known as the Anti-Corruption and Fraud Investigations Unit, was founded only in 1999.

<sup>322</sup> Twelve complaints were related to non-fraud-and-corruption procurement issues, and six were general inquiries or requests for clarification.

<sup>323</sup> Correspondence about two complaints suggested that they had been forwarded to INT, but there is no record of the forwarding correspondence.

### C. Distribution of Complaints across Procured Items

Table 23 shows the distribution of complaints by the items being procured, and a comparison of that percentage with the share of contracts and funding assigned to those items.

**Table 23. Distribution of Complaints**

Item	Number of complaints	Share of complaints	Share of ICB / NCB Funds	Share of contracts
Synthetic Pyrethroids	24	38%	55%	31%
Bed nets	21	33%	19%	15%
Rapid Diagnostic Test Kits	5	8%	2%	7%
Artesunate	4	6%	1%	2%
Chloroquine	2	3%	7%	10%
Arteether	2	3%	4%	4%
DEC tablets	0	0%	7%	13%
Combi-Blister Packs	0	0%	2%	5%
Others	5	9%	3%	13%
Total	63	100%	100%	100%

While there was not a direct one-to-one correlation between a procured item's share of complaints and its share of project funds and contracts, in general items receiving a larger share of project funds and contracts also received a larger share of complaints. Thus Pyrethroids and bed nets, the items receiving 74 percent of project funds and 46 percent of project contracts, received 71 percent of all complaints. The exceptions to this trend are:

- Artesunate, which was overrepresented with eight percent of complaints but only one percent of funds and two percent of contracts; and
- Chloroquine and DEC tablets, which received only three percent and none of the complaints, while each receiving seven percent of project funds and 10 percent and 13 percent, respectively, of project contracts.

### D. Complaint Resolution Statistics

Documents obtained by INT indicate that 44 percent (28 of 63) of the MCP complaints received by the Bank appear to have been resolved. INT is unable to determine, because of incomplete documentation or a lack of Bank follow-up, whether the remaining 35 complaints were addressed.

# TUBERCULOSIS CONTROL PROJECT

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## Overview

### Project Objective

India's National Tuberculosis Control Program (NTCP) has been in place since 1962. Historically, the basic feature of the program was drug treatment in the form of long-course chemotherapy (LCC).<sup>1</sup> Although very successful in its early years, the NTCP saw diminishing gains over time.<sup>2</sup> In 1992, a joint review of the program by the Swedish International Development Agency, the World Health Organization (WHO), and the Government of India recommended the introduction of a new approach to tuberculosis control, namely the Directly Observed Treatment—Short Course (DOTS) approach.<sup>3</sup> Under DOTS, patients are diagnosed by high-quality sputum microscopy, after which they receive appropriate medication and six to eight months of strict follow-up, supervision, and monitoring.<sup>4</sup> The new approach was expected to enhance patient adherence to treatment and increase cure rates.

The new DOTS approach was first tested in India through a series of pilot projects starting in 1993.<sup>5</sup> The results of the pilots were very encouraging. Through September 1996, the pilot projects had treated close to 16,000 patients in a population of roughly 12 million, with cure rates as high as 92 percent in some of the pilot sites and an average of 80 percent for all the sites.<sup>6</sup> These cure rates were much higher than those achieved using the LCC approach, which WHO had estimated at approximately 35 percent in the public sector.<sup>7</sup>

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<sup>1</sup> TCP ICR (Jun. 29, 2006), p. 2.

<sup>2</sup> *Ibid.*

<sup>3</sup> *Ibid.*

<sup>4</sup> *Ibid.*, p. 3.

<sup>5</sup> *Ibid.*, p. 2.

<sup>6</sup> *Ibid.*

<sup>7</sup> *Ibid.*

In 1997, it was estimated that up to half of India's population was infected with tuberculosis.<sup>8</sup> The Government of India decided that the new DOTS approach to tuberculosis (TB) control would gradually replace the LCC approach throughout the country, and it introduced the Revised National Tuberculosis Control Program (RNTCP) to implement the DOTS approach. The Tuberculosis Control Project (TCP) was designed to assist in the expansion of the RNTCP. The TCP sought to reduce TB-caused mortality, morbidity, and disability by expanding the DOTS approach throughout India, thereby reducing the annual risk of TB infection, the incidence of infections, and the development of drug-resistant TB.<sup>9</sup> Initially, the TCP aimed to reach 270 million people, or one-third of the Indian population.<sup>10</sup> In 2002, the scope of the project was expanded and was ultimately introduced into every district in India, making it possible to serve essentially the entire population of India.<sup>11</sup>

The TCP became effective on April 14, 1997,<sup>12</sup> with an original budget of USD 176 million<sup>13</sup> and a closing date of December 31, 2002.<sup>14</sup>

## Summary of Findings

The DIR's review of the TCP found that:

1. the implementation of pharmaceuticals and equipment purchased under the TCP generally demonstrated proper supply, good quality, and few deficiencies in the project's supply and distribution chains. However, the DIR observed significant indicators of collusion in the international competitive bidding (ICB) procurement of pharmaceuticals that went undetected by the borrower. These indicators included identical or nearly identical unit prices, attempted bid rotation, and attempted division of the market between two firms. This collusion was unsuccessful only because the apparently colluding firms were deregistered on other grounds and disqualified from the tenders;

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<sup>8</sup> TCP Staff Appraisal Report, para. 2.1 (Jan. 6, 1997).

<sup>9</sup> TCP ICR, p. 2.

<sup>10</sup> *Ibid.*; see also ICR, p. 6, para. 3.4.

<sup>11</sup> ICR, p. 7, para. 4.1.

<sup>12</sup> *Ibid.*, p. 1.

<sup>13</sup> *Ibid.*, Annex 2, p. 26; ICR, Project Data, p. 1.

<sup>14</sup> ICR, Project Data; ICR Annex 2, p. 26.

2. decentralized procurements revealed widespread indicators of collusion, fraud, and corruption, such as strong similarities between competing bids language and/or presentation, bidders with identical phone numbers, and related bid prices; and
3. the Bank's project reports and assessments revealed that while the Bank's response to complaints was adequate, its response to the findings in other project reports<sup>15</sup> was inadequate.

The DIR's review of TCP's implementation and distribution of pharmaceutical and equipment purchases in four states and 12 districts—accounting for 40 percent of TCP Bank funds—revealed generally proper supply, good quality, and few deficiencies in the project's supply and distribution chains. In contrast, the DIR uncovered a number of indicators of corrupt practices associated with the centralized procurement of pharmaceuticals through ICB processes. In particular, the DIR found strong indicators of collusive behavior between two suppliers, Nestor Pharmaceuticals Limited and Pure Pharma Limited—companies recently debarred by the Bank for collusive practices on another India health sector project ongoing during the same period. Because these collusive practices apparently went undetected, and apparently were undertaken by the same players across multiple projects, they signify a risk factor that needs to be monitored closely to ensure program integrity going forward with respect to the TCP's successor project and other projects involving pharmaceutical procurements.

Among the numerous indicators found, the DIR discovered indicators that these companies engaged in collusive practices on at least five invitations for bids through the submission of identical unit prices and complementary quantities that would potentially lead to contract splitting or contract award rotation. Although these companies were the lowest evaluated bidders on contracts worth millions of dollars, an unrelated decision by the Government of India to “deregister” these two companies because they provided substandard drugs prevented their schemes from fully manifesting. Nevertheless, had the deregistration not occurred, it is likely these companies would have succeeded in their scheme because the indicators of fraud apparently went undetected.

In contrast to the centrally procured pharmaceutical and equipment purchases, the DIR's review of procurement by the state and district tuberculosis offices revealed a high percentage of procurements showing indicators of collusion,

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<sup>15</sup> TCP Audit Reports, Procurement Post Reviews and Statement of Expenditure (SOE) Reviews.

fraud, or corruption (*i.e.*, 100 of 143 local shopping contract files, or 70 percent in number and 78 percent in value of the DIR-reviewed contracts). Among the dozens of collusive indicators were strong similarities in competing bids' language and presentation, bidders sharing the same addresses and telephone numbers, unit prices showing a common formula, and indicators of intent to split contract awards among several bidders. Included among the indicators of fraud or corruption were signs of potential document tampering, quotations submitted after the submission deadline, and substantial recordkeeping deficiencies. Procurements conducted under prior-review thresholds are particularly susceptible to fraudulent and corrupt practices and, while the Bank's procurement post-review identified a number of indicators of fraud, collusion, or corruption, the DIR found no evidence that the Bank had taken any affirmative action to address the indicators identified or mitigate ongoing risks in this area.

The DIR's analysis of the Bank's project reports and assessments resulted in both positive and negative findings. On the one hand, the DIR found that the Bank appeared to have responded adequately to specific complaints from firms relating to TCP procurement and implementation. In general those complaints were investigated and resolved. On the other hand, while TCP audit reports, procurement post-reviews, financial reviews, and the ICR identified indicators of possible fraud, corruption, and collusion, there is no indication that the Bank acted with rigor to investigate or rectify those problems.

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## Project Background

### Design

#### A. Components

The TCP became effective on April 14, 1997,<sup>16</sup> with an original budget of USD 176 million<sup>17</sup> and a closing date of December 31, 2002.<sup>18</sup> Of the TCP's total original budget, USD 142.4 million (or 81 percent) was to be funded with an International Development Association (IDA) credit (Credit Number 2936 IN) and the

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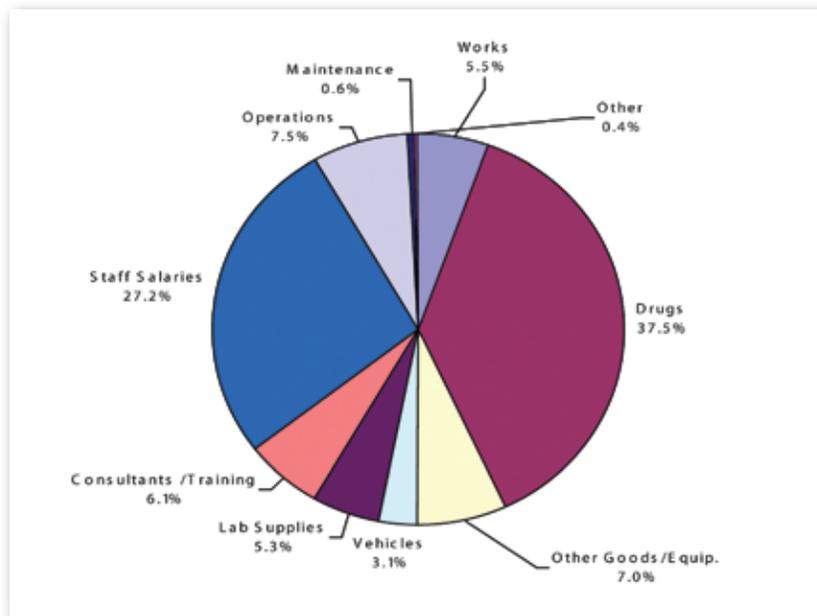
<sup>16</sup> *Ibid.*, p. 1.

<sup>17</sup> *Ibid.*, Annex 2, p. 26; ICR, Project Data, p. 1.

<sup>18</sup> ICR, Project Data; ICR Annex 2, p. 26.

remainder (19 percent) by the Government of India.<sup>19</sup> Other donors provided funds for RNTCP initiatives that were not directly supported by the TCP.<sup>20</sup> Most of the TCP's funds (81 percent) were committed to expanding the DOTS approach throughout India by improving the quality of, access to, and outcomes from that treatment. Credit funds were also used for capacity building (11 percent of the credit) and community promotion (8 percent). Figure 1 breaks down total TCP expenditures by category.

**Figure 1. TCP Expenditures by Category<sup>21</sup>**



Source: TCP ICR, June 29, 2006.

## B. Implementation Structure

The TCP was administered by the national institutions already implementing the RNTCP. Specifically, the Government of India's Central Tuberculosis Division (CTD), located within the Ministry of Health and Family Welfare (MOHFW), oversaw the RNTCP (and the TCP) on a national level. The CTD was responsible for (1) coordinating the program with the states; (2) ensuring the flow of funds; (3) overseeing implementation of technical and operational policies, guidelines, and procedures through frequent field visits and data analysis; (4) coordinating the

<sup>19</sup> *Ibid.*, p. 15, para. 5.4.

<sup>20</sup> *Ibid.*, p. 6.

<sup>21</sup> Due to rounding of percentages the chart illustrates 0.2 percent in excess.

project's procurement and distribution of pharmaceuticals, vehicles, and equipment; and (5) reviewing media services and program evaluation proposals.<sup>22</sup>

Procurement was conducted primarily at the national level, initially by the MOHFW, then on an interim basis by the Hospital Services Consultancy Corporation (HSCC). In 2000, an independent professional procurement support agency, Metallurgical & Engineering Consultants (India) Ltd. (MECON), was selected to oversee procurements. When the project was extended in 2005, WHO's Global Drug Facility assumed the responsibilities for managing procurement under the TCP.<sup>23</sup> Throughout the project, procurement occurred at the state and district level with respect only to relatively minor items such as small equipment, equipment maintenance, vehicles, and the salaries of temporary staff.<sup>24</sup>

Initially, project funds flowed directly from the national CTD to districts, effectively bypassing the state level. Diagnostic and treatment services were centralized at the district level. This design proved to be flawed because states lacked ownership over the process, and services did not reach sufficient numbers of people. In response, the project was restructured substantially in 2002. Responsibility for administrative support, financial management, flow of funds, and implementation was shifted to semi-autonomous "societies" at the state and district levels. Responsibility for planning, monitoring, and integrating was shifted to governmental "state cells." "District cells" became responsible for providing technical guidance and logistical support, and for supervising implementation. Sub-district cells were also created to further decentralize the TB control infrastructure. These sub-district cells were responsible for quality control by reviewing patient registration, diagnosis, case management, and reporting.

### **C. Project Controls**

At the TCP's initiation, and after a successful pilot project experience, the Bank assessed that the common risks associated with primary health projects, such as procurement deficiencies, late disbursement, and inadequate maintenance of equipment, were fairly minimal.<sup>25</sup> However, the Bank did identify several risks, including that implementing agencies would be "unable" to provide the leadership and services required to ensure proper implementation of the program, and that

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<sup>22</sup> STAR, pp. 32–33, para. 4.23.

<sup>23</sup> ICR, pp. 14–15, para 5.2.

<sup>24</sup> STAR, pp. 42–44, paras. 4.58–4.61.

<sup>25</sup> *Ibid.*, p. 48, para. 5.4.

supply of drugs would be “uneven” given the “spotty record of drug deliveries” and the potential “misuse” of large quantities of drugs.<sup>26</sup>

To address those risks, the Government of India agreed to maintain adequate staffing for the duration of the project<sup>27</sup> and to ensure that pharmaceuticals would be supplied on a regular basis.<sup>28</sup> The Government of India also agreed to develop a patient registration system that would report case findings, test results, treatment outcomes, and medication orders<sup>29</sup> and that would assist in detecting inadequacies in drug deliveries or misuse of drugs.

The TCP also included specific controls designed to monitor issues relating to procurement, implementation, and financial transactions.

### 1. *The Government of India’s Controls*

*Implementation Controls.* The Government of India instituted a number of procedures to monitor the success of the TCP’s implementation. Regional consultants hired by the CTD conducted field visits and provided quarterly reports highlighting major obstacles for project progress.<sup>30</sup> Independent laboratories conducted quality tests on pharmaceuticals delivered under the project, and an independent annual audit of the drug procurement and distribution system was conducted.<sup>31</sup> In addition, the CTD was responsible for monitoring and reporting to the Bank with respect to (1) the progress of the TCP implementation plan; (2) logistics and quality control (based on information received from the procuring agency, suppliers, the Medical Stores Organization [MSO], monthly reports from Government Medical Store Depots [GMSDs], and quarterly reports from the states and districts); (3) progress in training and strengthening training institutions; (4) progress in recruiting staff and filling staff positions; and (5) patient satisfaction with the timing and availability of services, treatment by service providers, economic costs involved, and availability of medicines.<sup>32</sup>

The TCP also received support from WHO technical consultants, who monitored implementation and assisted in improving the quality of services by assisting in training, planning, monitoring, and surveillance.<sup>33</sup>

<sup>26</sup> *Ibid.*

<sup>27</sup> TCP Credit Agreement, Sched. 4, para. 6(a) (Mar. 14, 1997).

<sup>28</sup> *Ibid.*, Sched. 4, para. 3.

<sup>29</sup> *Ibid.*, Sched. 4, para. 2.

<sup>30</sup> STAR, p. 37, para. 4.43.

<sup>31</sup> *Ibid.*

<sup>32</sup> *Ibid.*, Annex 20, pp. 183–84.

<sup>33</sup> RNTCP II Project Implementation Plan (May 31, 2005), p. 57, para. 5.1.5.

*Financial Controls.* In terms of financial controls, the CTD was responsible for monitoring and reporting to the Bank on (1) expenditures and budget utilization (based on a monthly expenditure report and information collected from the field by visiting CTD officers); and (2) cost reimbursements. In addition, expenditures were audited annually by independent auditors and chartered accountants, and certified copies of the annual financial statements and statements of expenditures (SOEs) were sent to the Bank, together with the auditor's report.<sup>34</sup>

## 2. *The Bank's Controls*

As noted above, the Bank received reports from the CTD with respect to numerous implementation and financial issues. In addition, the Bank conducted review missions twice annually and operational and technical reviews every two years.<sup>35</sup> Over the eight-year project implementation period, the Bank conducted 15 supervision missions.<sup>36</sup> Review teams included specialists in public health, disease control, epidemiology, social development, HIV/AIDS, financial management, disbursement, and procurement.<sup>37</sup>

## D. **Costs and Time**

The project closed on March 31, 2006, after being extended three times because of (1) a two-year disbursement suspension caused by procurement delays (see discussion below); (2) reallocation of USD 14.9 million from a polio eradication program to the TCP; and (3) the need to allow the project additional time to complete its procurement of pharmaceuticals.<sup>38</sup> As a result of substantial overestimation in the original cost estimates and subsequent unexpected declines in the prices of important items including drugs and microscopes,<sup>39</sup> only USD 100.2 million of the IDA credit was ultimately spent.<sup>40</sup> The IDA credit covered 87.5 percent of the total costs, whereas the Government of India covered 12.5 percent.<sup>41</sup>

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<sup>34</sup> *Ibid.*, p. 46, para. 4.69.

<sup>35</sup> STAR, p. 39, para. 4.47.

<sup>36</sup> ICR, p. 17.

<sup>37</sup> *Ibid.*

<sup>38</sup> ICR, p. 6, para. 3.4.

<sup>39</sup> *Ibid.*, p. 16, para. 5.4.

<sup>40</sup> *Ibid.*, Annex 2, p. 27.

<sup>41</sup> *Ibid.*

## Implementation

### A. Initial Problems

The Board approved the TCP on January 30, 1997, and the project became effective on April 14, 1997. The MOHFW was to carry out procurement for the first year of the project, with the understanding that continuation of that arrangement would depend on the MOHFW's successful performance during that year.<sup>42</sup> Otherwise, the MOHFW would be required to hire the services of a professional procurement agency.

Procurement problems soon became apparent, resulting in long delays between the opening of bids and awarding of the corresponding contracts.<sup>43</sup> In late 1997, the Bank recommended that the MOHFW immediately outsource procurement to a professional procurement agency, and the MOHFW agreed that it would do so by January 31, 1998.<sup>44</sup>

On February 25, 1998, the Bank issued a letter to the Department of Economic Affairs, advising that the Bank would be obliged to suspend the Borrower's right to make further withdrawals from the credit effective March 25, 1998, unless an independent procurement agent, acceptable to the Bank, was appointed before this deadline.<sup>45</sup> The Borrower failed to meet the deadline, causing the Bank to suspend further withdrawals from the credit effective March 26, 1998.<sup>46</sup>

### B. Suspension

The Bank informed the Borrower that the suspension would be lifted when the Bank was satisfied that (1) implementation of the service delivery component was proceeding satisfactorily; and (2) the Borrower appointed a procurement agent on a competitive basis acceptable to the Bank. In October 1998, due to project exigencies, the MOHFW was permitted to appoint (on a sole-source basis) HSCC to serve as an interim procurement support agency.<sup>47</sup>

<sup>42</sup> *Ibid.*, p. 14, para. 5.2.

<sup>43</sup> *Ibid.*

<sup>44</sup> *Ibid.* Even before the project was approved, the Bank concluded that “[s]trong consideration should be given to avoiding burdening the TB unit with the task of procurement which can be done by a specialized agency.” *Aide-Mémoire* (May 13–16, 1996), p. 3.

<sup>45</sup> ICR, pp. 14–15, para 5.2.

<sup>46</sup> *Ibid.*

<sup>47</sup> *Ibid.*

Thereafter, the MOHFW moved slowly on the competitive selection of a procurement agent.<sup>48</sup> On January 28, 2000—nearly two years after the suspension began—the Government of India signed a contract with MECON for this purpose.<sup>49</sup>

### C. Performance

On March 21, 2000, the Bank lifted the suspension after concluding that the Borrower had satisfactorily met the stated conditions.<sup>50</sup> Thereafter, the Bank generally assessed the status of project implementation as “satisfactory,” and gave a “highly satisfactory” rating in 2004, approximately 18 months before the project closed.<sup>51</sup> The Bank assessed the relative success of development objectives by examining coverage, detection, and cure rates, all of which regularly demonstrated positive trends that exceeded expectations. The “highly satisfactory” rating was based on what the Bank perceived as (1) employment of clear guidelines for procurement, financial management, and technical aspects of the project; (2) strictly enforced supervision; and (3) timely and regular monitoring and reporting.<sup>52</sup> During Bank mission visits in 2003, it was noted that drugs were “universally available in adequate quantities and records continue to be well maintained.”<sup>53</sup>

However, the Bank did note concerns with respect to procurement and disbursement lags and certain aspects of financial management. For example, in late 2004 the Bank noted “with concern” the “significant delays in the procurement of drugs and microscopes.”<sup>54</sup> The manager reviewing this Bank mission report commented that “[i]t [was] something of a puzzle that, in a project which has reached a disbursement lag of 50 months, achievement in terms of the Key Indicators for the PDO [coverage, detection, and cure rates] exceed the forecast at appraisal.”<sup>55</sup> Procurement problems persisted through the last year of the project, during which (as described in greater detail below) the Bank refused to provide a no-objection to the award of contracts to a firm that had not been prequalified, as the tender procedures required.<sup>56</sup> Furthermore, there were persistent problems with obtaining SOEs from the states for reimbursement.<sup>57</sup>

<sup>48</sup> *Ibid.*

<sup>49</sup> *Ibid.*

<sup>50</sup> *Ibid.*

<sup>51</sup> *Ibid.*, Annex 4, p. 29.

<sup>52</sup> *Aide-Mémoire* (Apr. 1–30, 2004) (parts of this document appear to be missing); see also *Aide-Mémoire* (Sept. 27–Oct. 14, 2004).

<sup>53</sup> Project Status Report (PSR) (Dec. 1, 2003).

<sup>54</sup> PSR (Nov. 30, 2004).

<sup>55</sup> PSR (Jun. 1, 2004) (Manager’s Comments).

<sup>56</sup> *Aide-Mémoire* (Apr. 11, 2005).

<sup>57</sup> PSR (Nov. 30, 2004).

Following the agreement to extend the project closing date in September 2005, a further mission was conducted later in 2005.<sup>58</sup> The supervision team sought to ensure that further procurement delays would be avoided and that the government would forward in a timely manner the disbursement claims to guarantee full disbursement of the remaining credit.<sup>59</sup> The mission reported that “issues to be addressed” included (1) adherence to internal control procedures in states and district societies; and (2) the need for consistency in accounting policies.<sup>60</sup> The implementation status report (ISR) nevertheless defended the recent “highly satisfactory” rating, stating that it was justified given that “compared to other national public health programs in India, this program is exceptionally well organized and managed.”<sup>61</sup>

#### D. Project Evaluation

The Implementation Completion Report (ICR) rated the TCP’s achievement of its objectives as “satisfactory.”<sup>62</sup> The Bank’s performance was rated “satisfactory”<sup>63</sup> and the Borrower’s “moderately satisfactory.”<sup>64</sup> For the reasons described above, the ICR rated the Borrower’s presuspension performance as “unsatisfactory.”<sup>65</sup>

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## The DIR’s Approach to the TCP

The TCP was included in the DIR because certain suppliers found to have colluded in connection with the Reproductive and Child Health Project (RCH) also competed for contracts under the TCP. These suppliers were competing for contracts procured using ICB. As depicted in Figure 2, ICB procurements of pharmaceuticals and equipment between 1999 and 2004 accounted for more than 40 percent of the funds advanced by the Bank under the TCP.<sup>66</sup> Accordingly, the DIR focused a large portion of its review on those contracts.

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<sup>58</sup> ISR (Nov. 20, 2005).

<sup>59</sup> *Ibid.*

<sup>60</sup> *Ibid.*

<sup>61</sup> *Ibid.*

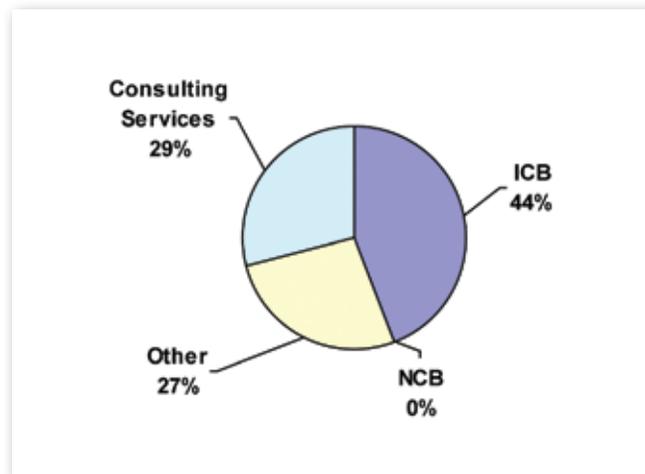
<sup>62</sup> ICR, p. 7, para. 4.1.

<sup>63</sup> *Ibid.*, p. 18, para. 7.3.

<sup>64</sup> *Ibid.*, p. 20, para. 7.7.

<sup>65</sup> *Ibid.*, p. 19, para. 7.6.

<sup>66</sup> The total value of the contracts at issue was approximately USD 40.2 million and disbursements under the

**Figure 2. Percentage of TCP Procurements by Procurement Method**

Note: The ICR does not specify the amount of project funds that were disbursed for procurement at the local level.

Source: TCP ICR, June 29, 2006.

## Procurement of Contracts

### A. Pharmaceuticals and Equipment

The DIR reviewed the procurement process relating to 80 contracts (69 ICB contracts and 11 supplemental contracts awarded to some of the winners of those ICB contracts),<sup>67</sup> out of 81 contracts procured.<sup>68</sup> To detect patterns indicating possible fraud or corruption, the DIR reviewed and analyzed hundreds of documents, including:

- Information extracted from the DIR's contract database
- Individual companies' bid submissions
- Bid evaluation reports (BERs)

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IDA credit totaled USD 100.2 million. Since almost all contracts were paid in Indian rupees, the U.S. dollar amounts cited in this chapter were calculated using a yearly average exchange rate for the year in which the contract was signed.

<sup>67</sup> Under the original contracts, the TCP reserved the option of requesting up to an additional 20 percent of goods, beyond the quantity called for by the contract, if the project later determined that it needed the additional items. The suppliers were required to provide the items at the same price and on the same terms as the items initially provided under the contract.

<sup>68</sup> The bidding process for procurement services (awarded to MECON) was not obtained for review by the DIR.

- Contracts awarded under the TCP<sup>69</sup>
- Correspondence among bidders, project officials, and the Bank.

In addition to conducting a detailed analysis of the individual contract packages, the DIR performed an in-depth analysis across all of the data, looking for indicators such as identical addresses of bidders; identical phone number of bidders; multiple companies with the same officials; sequential bid securities; inadequate time to prepare bids; continuous membership on the Bid Evaluation Committee (BEC); and unreasonable delays in evaluating and awarding bids. The DIR also looked for indicators of price inflation by examining prices paid by the TCP and comparing those prices with prices published in the International Drug Price Indicator Guide published by Management Sciences for Health.

## B. Locally Procured Contracts

The DIR also reviewed 143 locally procured TCP contracts, according to the previously described general methodology used for other projects. The DIR selected district sites in Pune, Maharashtra, and Bangalore, Karnataka,<sup>70</sup> based on DIR selection methodology. In Pune, representatives of the District Tuberculosis Officer (DTO) produced most of the local shopping documents requested by the DIR, and the DIR found those documents generally to be in good order. In contrast, the document filing systems in Bangalore were not always satisfactory. This delayed and impacted the completeness of the DIR's review. In many instances, key documents, including bid evaluation reports, bids, or bid securities, were missing altogether.

## Project Implementation

The DIR analyzed the project's supply and distribution chain for indicators that the goods were unaccounted for, undelivered, or of a lesser quality than what was required by the applicable contracts. As noted above, the DIR focused on those contracts associated during the review of contract procurement with indicators of fraud, also taking into consideration the shelf life of the pharmaceuticals at issue. With those factors in mind, the DIR focused on two procurements of pharmaceuticals (a total of 33 contracts), three procurements of microscopes (a total of nine

<sup>69</sup> In some cases, the poor quality (or lack of completeness) of the available documents prevented a comparison of the bid submissions with the information reported in the BERs. This limitation was significant when considering the propriety of declaring certain bidders as non-responsive, a frequent occurrence in the tenders at issue.

<sup>70</sup> Bangalore City, Bangalore Rural, and Karnataka State Tuberculosis Control Society.

contracts), and the procurement process resulting in a single contract to supply LCD projectors.

On the basis of the consignee lists relating to the selected contracts, the DIR traveled to the states of Maharashtra, Uttar Pradesh, Karnataka, and Chhattisgarh and visited multiple districts within each of those states. While there, the DIR visited the following locations:

### *Maharashtra*

- The State TB Headquarters in Mumbai
- The GMSD in Mumbai
- The District TB Control Societies in Mumbai and Nagpur
- Treatment units (a total of four) in Mumbai, Thane, and Nagpur
- District stores in Thane and Nagpur.

### *Chhattisgarh*

- The State TB Headquarters
- The State Drug Store in Raipur
- District TB centers (including the District Drug Stores) in Raipur and Durg
- The District Drug Store in Mahasamund
- Treatment units (a total of three) in Raipur, Durg, and Mahasamund.

### *Karnataka*

- The State TB Headquarters
- The State TB Treatment and Demonstration Centre
- District TB centers (including the District Drug Stores) in the Bangalore City District, the Bangalore Urban District, and Mandya
- The District Drug Store in the Bangalore Rural District
- A DOTS center in the Bangalore City District
- Treatment units (a total of six) in the Bangalore City District, the Bangalore Urban District, the Bangalore Rural District, and Mandya
- The Microscopy Unit in Mandya.

## *Uttar Pradesh*

- The State TB Headquarters in Lucknow
- District TB centers (including the District Drug Stores) in Lucknow and Unnao
- The District Office/Drug Store/Treatment Centre/DOTS Centre in Ghaziabad
- Treatment units (a total of five) in Lucknow and Unnao
- A Microscopy/DOTS center in Unnao.

During those visits, the DIR spoke with numerous officials, consultants, doctors, and others; reviewed stock registers and inventories; examined receipts; inspected stockrooms; and observed treatment facilities.

### **A. Pharmaceuticals**

With respect to pharmaceuticals, the DIR's implementation review focused on three potential risks: undersupply, poor quality, and flaws in the supply chain. To address those issues, the DIR (1) examined whether the pharmaceuticals were provided in the required quantities; (2) collected samples of the delivered pharmaceuticals for testing by an independent laboratory; (3) inquired with officials in each of the districts about tests that the Government of India or others may have conducted on the pharmaceuticals; and (4) reviewed each district's records to determine whether pharmaceuticals were actually delivered from the reception points to patients in each district.

### **B. Equipment**

With regard to equipment, the DIR focused its implementation review on analyzing whether (1) the equipment was received by the consignees specified on the lists provided to the DIR; (2) the equipment satisfied the contractual technical specifications; (3) contractual clauses had been properly executed (guarantees, technical service obligations, etc.); (4) the equipment was adequate for its intended purposes; and (5) the equipment was fully functioning.

## **Complaints**

The DIR also examined the complaints that were lodged with respect to the TCP procurements discussed herein. The DIR obtained details of 21 complaints from

the Bank's databases and correspondence files provided by the India procurement hub to determine (1) whether and how they overlapped with the DIR's findings; and (2) whether and how the Bank addressed them.

## **Project Reports and Assessments**

The DIR obtained and reviewed the TCP design, supervision, and evaluation documents. These included the TCP Staff Appraisal Report (STAR), the TCP Project Implementation Plan (PIP), various *aides-mémoire*, Project Status Reports (PSRs), ISRs, the TCP ICR, available procurement post-review reports, and available project audit reports. The DIR analyzed these materials to understand how the Bank assessed fraud and corruption risks in the project's design and to determine whether the indicators of fraud identified by the DIR were recognized by the Bank's supervision systems.

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## **Findings**

The DIR found numerous indicators of corrupt practices associated with the centralized procurement of pharmaceuticals for the TCP through ICB procedures. However, the DIR notes that certain events prevented the collusive schemes from flourishing. For locally procured contracts, DIR findings in both Maharashtra and Karnataka indicate an elevated risk. This risk appears to have gone undetected by the Bank's traditional supervision methods and procurement post-reviews. The patterns of indicators of collusion, fraud, and corruption discovered in Maharashtra and Karnataka were very similar and included indicators of collusive practices among bidders and indicators of corrupt behavior between bidders and procurement officials.

### **Pharmaceuticals**

The DIR identified numerous indicators that Nestor and Pure Pharma colluded in connection with their bids for a number of TCP contracts. Those companies—which were previously found to have colluded in connection with other Bank-financed contracts—submitted several bids containing identical or nearly identical unit prices. In addition, their bids were patterned in a way that suggests that

the companies may have intended to divide the number of contracts awarded to each of them. Understanding these indicators—and the controls that may have prevented a collusive scheme from succeeding—may provide valuable lessons to Bank staff and government officials in attempting to prevent and detect such practices in the future.

From 1999 through 2004, five of the TCP’s nine bidding invitation rounds were for the supply of pharmaceuticals, which were assigned product codes (PCs) numbered from 1 to 13. PC1 through PC4 were described as “treatment boxes” and contained the entire course of treatment for a patient under the DOTS program. The remaining PCs were blister strips of pills used to reconstitute partly used treatment boxes,<sup>71</sup> to supplement a patient’s treatment course, or to treat a patient when the DOTS regime was determined to be an inappropriate treatment method. A description of the contents of each PC is provided at the end of this chapter.<sup>72</sup> Some of the tenders involved bidding on multiple lots of certain PCs, and qualified suppliers were permitted to participate for multiple lots. Table 1 summarizes the number and value of TCP contracts bid on and won by Nestor and Pure Pharma between 1999 and 2004.<sup>73</sup>

**Table 1. Number and Value of Contracts Bid on and Won by Nestor and Pure Pharma under TCP Tenders, 1999–2004**

Company	1999		2000		2001		2002		2004		Totals	
	#/ \$ Bid	#/ \$ Won	#/ \$ Bid	#/ \$ Won	#/ \$ Bid	#/ \$ Won	#/ \$ Bid	#/ \$ Won	#/ \$ Bid	#/ \$ Won	#/ \$ Bid	#/ \$ Won
Nestor Pharmaceuticals Limited	11/ \$8.0M	2/ \$2.1M	7/ \$5.5M	5/ \$5.4M	3/ \$3.7M	0/ \$0	16/ \$6.3M	2/ \$0.2M	17/ \$10.1M	2/ \$2.3M <sup>a</sup>	57/ \$33.6M	11/ \$10M
Pure Pharma Limited	12/ \$8.5M	1/ \$1.3M	10/ \$7.9M	0/ \$0	2/ \$1.7M	2/ \$1.7M	14/ \$5.4M	0/ \$0	5/ \$3.0M	0/ \$0	44/ \$26.5M	3/ \$3.0M

Note: “#/\$ Bid” reflects the number of contracts for which the company submitted bids (#) and the value, in U.S. Dollars, of those contracts. “#/\$ Won” reflects the number of contracts won by the company and the value, in U.S. dollars, of those contracts.

<sup>a</sup> As discussed in greater detail below, the BEC initially recommended awarding USD 10.1 million of contracts to Nestor under this tender, but the Bank refused to give its no-objection to that award, because Nestor had not prequalified, as required by the rules governing the tender.

<sup>71</sup> Boxes were reconstituted when, for example, a patient died.

<sup>72</sup> For some ICB tenders, the project chose not to purchase items bearing certain PCs because it did not require these items at that specific time. As a result, there may be gaps in the numerical sequence of PCs for some tenders.

<sup>73</sup> According to Pure Pharma’s website, that company was established in 1955. Together with its sister company, Promed Laboratories, Pure Pharma boasts annual sales exceeding USD 12 million, in India, Sri Lanka, the Philippines, Bangladesh, Ghana, and other countries. According to Nestor’s website, that company was established in 1975 and became a Public Limited Company in 1994–1995. Nestor has two manufacturing plants, one at Faridabad Haryana (India) and the other at Goa (India). The company claims to produce “[o]ver 150 formulations of essential medicines . . . to a burgeoning clientele in India and abroad.”

To the extent that Nestor and Pure Pharma did collude, the Government of India's decision to deregister those companies may have prevented the scheme from flourishing. On numerous occasions, as discussed in more detail later in this report, Nestor and Pure Pharma submitted bids that would have been deemed the lowest qualified bid, were it not for the fact that the BEC deemed the bids non-responsive because the companies were deregistered. Table 2 illustrates the stark difference between the volume of Nestor and Pure Pharma's *actual* contract awards and the volume of awards those companies would likely have received had they not been deregistered (*i.e.*, the instances in which the companies were the lowest qualified bidder, except for the fact of deregistration).

**Table 2. Nestor and Pure Pharma's Actual Awards Versus Likely Awards in the Absence of Deregistration, 2001–2004 Tenders (*in USD*)**

Company	2001		2002		2004	
	Actual	Likely	Actual	Likely	Actual	Likely
Nestor Pharmaceuticals Limited	0	3,829,215	149,836	2,632,231	2,299,804	10,131,322
Pure Pharma Limited	1,661,439	1,661,439	0	2,289,377	0	0
Subtotal	1,661,439	5,490,654	149,836	4,921,608	2,299,804	10,131,322
Total TCP Contracts	6,350,801	6,350,801	6,350,282	6,350,282	5,017,268	12,848,786
% of Total Contracts	26	86	2	78	46	79

With regard to implementation, the DIR did not identify indicators that TCP suppliers provided inadequate or poor quality pharmaceuticals. Nor did the DIR discover indicators that prices were inflated.

## A. Review of Procurement

The review of contract procurements identified indicators of collusive behavior, the potential effects of which may have been mitigated by the Government of India's earlier decision to deregister the companies at issue. An earlier investigation into allegations of fraud and corruption concerning the RCH Project revealed that Nestor and Pure Pharma were part of a group of companies that engaged in fraudulent practices, including bid rigging and collusion. The RCH Project ran from 1997 to 2004, overlapping substantially with the TCP's 1999 to 2004 duration.

The earlier investigation uncovered the following evidence to establish that Nestor and Pure Pharma colluded to win the majority of pharmaceutical and kitting contracts under RCH and the Child Survival and Safe Motherhood (CSSM) project.<sup>74</sup>

- Nestor and Pure Pharma “split” the awarding of contracts by repeatedly bidding unit prices that varied by less than INR 5 (USD 0.11), and alternating the instances in which one of the companies’ bids was slightly lower than the other’s.<sup>75</sup>
- In 2002, Nestor and Pure Pharma bid identical unit prices for the supply of 358,590,000 IFA (Ferrous sulphate with folic acid) tablets.<sup>76</sup>
- The companies also split contracts by bidding complementary quantities, meaning that each company submitted unit prices that were nearly identical to the other’s, but bid on only a portion of the overall quantity offered by the tender. Each of the companies would then be awarded a portion of the overall contract. In one such instance, nine companies submitted bids with unit prices differing by as much as INR 132.52 (approximately USD 2.95), but the difference in prices offered by Nestor and Pure Pharma was a mere INR 0.90 (approximately USD 0.02).<sup>77</sup>
- Nestor, Pure Pharma, and two other companies won 93 percent of the total value of CSSM contracts, with Nestor winning USD 15 million of contracts, Pure Pharma USD 2 million, and the two other companies USD 3.2 million each.<sup>78</sup>
- Nestor and Pure Pharma also dominated the award of contracts under RCH, with Nestor winning 196 contracts worth USD 37 million and Pure Pharma winning 62 contracts worth USD 12 million, accounting for 65 percent of the total value of the contracts awarded.<sup>79</sup>

As a result of Nestor and Pure Pharma supplying substandard pharmaceuticals in connection with other procurements (unrelated to Bank-financed projects), the MSO deregistered both companies for various periods, apparently beginning in

<sup>74</sup> The CSSM Credit Agreement was signed in 1992 and that project closed in 1996.

<sup>75</sup> Full Report of Investigation into Reproductive and Child Health I Project Credit N0180 (Oct. 2005) (RCH Report), sec. 6.1.1.2.2.

<sup>76</sup> *Ibid.*

<sup>77</sup> *Ibid.*, sec. 6.1.1.2.3.

<sup>78</sup> *Ibid.*, sec. 5.1.

<sup>79</sup> *Ibid.*, sec. 6.1.

the late 1990s.<sup>80</sup> As described below, there were numerous occasions—relating to more than USD 16 million of contracts—on which those companies submitted the lowest qualified bids under the TCP, but were disqualified because they had been deregistered.

According to Dr. P. P. Singh, a senior MSO officer, the MSO is responsible for maintaining a register of all suppliers authorized to provide the Government of India with pharmaceuticals. MSO regulations provide that a company may be “deregistered” (*i.e.*, removed from the registry) for a period of time if it violates certain MSO rules (*e.g.*, by providing substandard pharmaceuticals). Although the deregistration process has typically been applied only to companies that fail to supply drugs of the required quality in connection with tenders conducted by the MSO itself, the deregistration is binding on *all* agencies of the MOHFW.<sup>81</sup>

The MSO registry is not publicly available, so requests for information may be made only in accordance with formal procedures specified in local legislation.<sup>82</sup> As a result, when the Bank is presented with requests for no-objections under MOHFW tenders, it does not have the benefit of access to the registry.

The BEC overseeing the 1999 TCP tender process excluded Pure Pharma because the company was deregistered at the time. Subsequently, on April 28, 2000, Pure Pharma was deregistered for one year as a provider of the injection form of dexamethasone 4 mg/ml. On December 10, 2002, the company was deregistered again, precluding Pure Pharma from providing isoniazid 300 mg tablets for the next three years. Nevertheless, as described in greater detail below, Pure Pharma submitted bids during that period for TCP contracts to provide pharmaceuticals containing isoniazid.

Nestor was deregistered as a provider of pyrazinamide 750 mg tablets for three years beginning August 9, 2001. Pyrazinamide was also an essential element of a number of TCP tenders for which Nestor submitted bids.<sup>83</sup>

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<sup>80</sup> Pure Pharma was excluded from the 1999 TCP tender because the company was deregistered at the time. However, the information reviewed by the DIR during a visit to the MSO had no details relating to the company prior to its subsequent deregistration in 2000. Consequently, the DIR was unable to determine the basis for or timing of Pure Pharma’s earlier deregistration.

<sup>81</sup> Dr. P. P. Singh interview (Mar. 23, 2007).

<sup>82</sup> During the 2002 TCP tender, companies were required to complete a declaration advising whether they were deregistered by the MSO for any product types.

<sup>83</sup> In a separate action on June 17, 2002, Nestor was deregistered for three years as a provider of amoxicillin oral, but that drug was not a component of any of the TCP tenders under review.

In a decision dated April 5, 2006, the MSO extended the terms of both companies' suspensions in light of the evidence of fraud uncovered during the investigation of the RCH Project.<sup>84</sup>

Available documentation suggests that Nestor and Pure Pharma may have continued their collusive behavior in connection with their TCP tenders in 1999, 2000, 2001, 2002, and 2004. As noted above, identical or nearly identical unit prices and apparent attempts to rotate which companies' bids would win various tenders were among the factors supporting the Sanctions Board's conclusion that Nestor and Pure Pharma colluded during the RCH tender processes.

In connection with their bids on approximately 30 TCP contracts, those same two companies similarly submitted identical or nearly identical unit prices. As described in greater detail below, those companies submitted numerous bids whose values were within one percent of each other, bid identical unit prices, and bid in a way that suggests that the two companies may have intended to split the contract awards between themselves.

### 1. *The 1999 Tender*

In connection with the 1999 tender for pharmaceuticals (the 1999 tender, HSCC-PUR-TBCP-P&V), Pure Pharma submitted bids relating to all 12 PCs and Nestor bid for all except for PC5.<sup>85</sup> Table 3 summarizes the bids submitted by all of the prospective suppliers under the 1999 tender and illustrates the bid price range for each PC, the winning bidder, the companies that were declared non-responsive, and individual contract values in USD.<sup>86</sup>

<sup>84</sup> The MSO information shows that Pure Pharma's previous suspension was extended for six months, commencing on February 12, 2006. Nestor's suspension was extended until further orders from the MSO.

<sup>85</sup> The BEC recognized that Pure Pharma had been deregistered "for a period of one year as per MSO letter No 1-18018-96-TB(ST-IV) dt 03.02.99." See 1999 BER, p. 19. Accordingly, the BEC excluded Pure Pharma from competing for PC 1-4, 7, and 8. *Ibid.*, pp. 19-22. In light of the constituent drugs making up those PCs, it appears that Pure Pharma was deregistered for Pyrazinamide 500mg (contained in PC1-4 and 8) and isoniziad tab 100 mg (contained in PC7). However, the DIR has not reviewed the referenced MSO letter and has no further details regarding the deregistration.

<sup>86</sup> Following the bid openings, three companies were immediately declared non-responsive, either because the company failed to provide evidence of the required manufacturing license or because the company was deregistered for one or more product codes. 1999 BER, p. 19. With respect to PC3, six companies who submitted lower bids than the winning bidder were subsequently declared non-responsive. *Ibid.*, pp. 20, 28. Ten such companies were subsequently declared non-responsive with regard to their bids for PC10. *Ibid.*, pp. 23, 29-30. The incomplete documentation provided by the procurement agent (HSCC) prevented the DIR from being able to determine whether those exclusions were appropriate.

**Table 3. Outcome of Bidding Process and Unit Prices for the 1999 Tender (Prices in INR)**

Company	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10	PC11	PC12	Total Awarded (USD)
Micron Pharmaceuticals	423.00			594.00		9.63		10.87	59.31		2.16	23.22	3,316,995
Pure Pharma Limited	482.30	822.50	428.30	680.30	3.47	10.88	1.74	14.80	64.43	15.47	2.25	23.40	1,260,349
Novartis India Limited	572.50	997.50	435.50	795.00		13.15	3.09	16.43	83.26	20.75	3.80	31.75	1,193,279
Lupin Laboratories Limited		694.71		551.48		9.42		10.21	59.37	13.59		23.00	1,077,786
Nestor Pharmaceuticals Limited	484.00	824.00	424.00	684.00		10.58	1.75	13.48	64.48	15.24*	2.24	25.00	848,588
Hindustan Antibiotics Limited					3.18	9.76		11.80		14.03		27.80	510,117
Ambuja Laboratories Limited											1.73		240,559
Lyka Labs Limited	419.41	735.53	362.47	585.25		7.27		12.10	59.56	15.18		17.21	68,650
Biological E. Limited										14.00			
Cadila Healthcare Limited	488.31	847.85	438.95	688.70				14.79	74.48	16.44		29.23	
Cadila Pharmaceuticals Limited								15.87		16.99			
Concept Pharmaceuticals Limited			455.52			11.43		16.82	69.86			31.96	
Goa Antibiotics & Pharmaceuticals Limited					3.49	9.32						27.16	
Karnataka Antibiotics & Pharmaceuticals Limited					3.60								
Lark Laboratories Limited						9.24	0.96	10.92		12.94		23.14	
Lincoln Pharmaceuticals Limited						10.22		14.70	64.49	13.79	1.95	29.80	
Maan Pharmaceuticals Limited	603.00	1063.00	531.00	875.00		11.70	1.53	17.70	71.50	14.00	2.30	36.00	
Maneesh Pharmaceuticals Pvt. Ltd.								11.48		13.48	2.28		
Maxheal Pharmaceuticals						11.40					2.19	30.90	
Panacea Biotech Limited						13.89				17.19		36.48	
Strides Aroclab Limited	480.40	823.30	425.50			10.54	1.60	14.20	64.24	15.22	2.30	24.40	
Contract Value (USD)	1,496,219	991,075	1,193,279	39,337	510,117	34,809	4,072	47,374	1,820,776	844,516*	240,559	33,841	8,516,324

Contract awardees (Note: For PC 10, Nestor and Pure Pharma bid for only portions of the tender, and as a result, both firms won contracts. This contract splitting is discussed in detail below.)

Non-responsive bidders

As Tables 3 and 4 illustrate, the prices quoted by Nestor and Pure Pharma were less than one percent apart in their bids for seven of the 11 PCs for which they both competed. And as shown in Table 3, Nestor and Pure Pharma's unit prices differed fairly dramatically from prices offered by other bidders.

**Table 4. Nestor and Pure Pharma Unit Prices for the 1999 Tender<sup>87</sup>**  
(Prices in INR)

Company Name/ Contract Value (as awarded)	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10	PC11	PC12
Nestor Pharmaceuticals Limited	484.00	824.00	424.00	684.00		10.58	1.75	13.48	64.48	15.24	2.24	25.00
Pure Pharma Limited	482.30	822.50	428.30	680.30	3.47	10.88	1.74	15.20	64.43	15.47	2.25	23.40
% Difference in Unit Price	0.35%	0.18%	1.00%	0.54%		2.76%	0.57%	11.32%	0.08%	1.49%	0.44%	6.40%

Source: 1999 BER, pp. 55–56.

In addition to containing similar or identical unit prices, Nestor and Pure Pharma's bids suggest that the companies may have attempted to split the contract awards between themselves. PC10 was the only item for which bids were submitted to fill only part of the order. Nestor offered to supply 43 percent of the required quantity at a unit price of INR 15.24 and was deemed to be the lowest evaluated bidder (although it was ranked 10th on price).<sup>88</sup> Pure Pharma bid a unit price of INR 15.47 (within 1.5 percent of Nestor's unit price) and was the second lowest evaluated bidder (although 11th on price). Because Nestor had bid to fulfill only part of the order, the balance of the order (3,537,858 units) was awarded to Pure Pharma at the slightly higher price.<sup>89</sup>

Moreover, the pattern of bids submitted by Pure Pharma and Nestor suggests that the companies may have desired to rotate which of the companies would win each contract, with Pure Pharma underbidding Nestor slightly on one lot, and Nestor underbidding Pure Pharma slightly on the next. As a result, and as depicted in Table 5, had Nestor and Pure Pharma collectively outbid their competitors on all of the contracts associated with the 1999 tender, the awards would have been split almost exactly evenly between the two companies.

<sup>87</sup> See 1999 BER, pp. 55–56.

<sup>88</sup> Total contract amount was for 5,937,858 units with Nestor offering to supply 2,400,000 units. 1999 BER, p. 30.

<sup>89</sup> *Ibid.*

**Table 5. Distribution of Contracts between Nestor and Pure Pharma, If They Had Won All Contracts in the 1999 Tender**

Company	Contract value (actual value after award, in USD)
Nestor Pharmaceuticals Limited	4,131,003
Pure Pharma Limited	4,351,479

## *2. The 2000 Tender*

Nestor and Pure Pharma also submitted nearly identical unit prices in connection with their bids under the 2000 pharmaceutical tender (the 2000 tender, IFB-MECON-RNC-RNTC-2000-01). Table 6 summarizes the bids submitted by all of the prospective suppliers under the 2000 tender and illustrates the bid price range for each PC, the winning bidder, the companies that were declared non-responsive, and individual contract values in USD.

Table 6. Outcome of Bidding Process and Unit Prices for the 2000 Tender (Prices in INR)

Company	PC1	PC2	PC3	PC4	PC5	PC6	PC8	PC9	PC10	PC11	PC12	PC13	Total awarded (USD)
Nestor Pharmaceuticals Limited		584.48	277.24			8.84		51.98	12.22	1.78		19.98	5,358,927
Concept Pharmaceuticals Limited	392.31	655.80	332.72	537.51			12.56	54.81			18.79	17.47	1,842,414
Hindustan Antibiotics Limited					2.88	8.95	13.20		10.64		23.00		553,550
Cadila Healthcare Limited	349.22	629.55	295.24	517.15		6.81	11.38	59.94	14.74	2.81	16.67	16.92	197,818
Biological E. Limited									10.98				
Cadila Pharmaceuticals Limited		991.20	556.05	800.46			14.99	114.31	15.38	3.45	36.19	22.16	
Carewell Pharma										1.77			
Indoco Remedies Limited								87.50					
Jackson Laboratories Private Limited					3.88	9.01	12.72		11.77	1.78	26.34	18.37	
Karnataka Antibiotics & Pharmaceuticals Limited					3.40								
Lupin Laboratories Limited	335.00	595.00	302.00	490.00				52.50	11.20			12.61	
Lyka Labs Limited				568.32		7.86	12.10				18.55	16.75	
Mac Laboratories Limited					3.33								
Macleods Pharmaceuticals Limited	331.66	576.34	286.42	493.26		6.59	12.06	52.26	13.61	2.72	15.58	18.60	
Maxheal Pharmaceuticals						10.60				2.06	25.80		
Micron Pharmaceuticals								51.93			16.92	14.94	
Novartis India Limited	320.00	575.00	270.00	480.00		6.85	8.75	46.00	12.50	2.60	16.00	11.25	
Pure Pharma Limited	322.11	589.41	284.31	473.31	3.06			51.66	12.22	1.80	19.71	19.71	
VVS Pharmaceuticals & Chemicals PVT. LTD.									12.33			19.52	
Vysali Pharmaceuticals Limited					3.08								
Contract Value (USD)	1,842,414	1,079,963	1,082,499	60,433	553,550	25,471	5,532	1,396,356	1,561,433	238,676	30,808	75,574	7,952,709

Contract awardees

Non-responsive bidders

The procurement agent did not provide the DIR with copies of nine of the companies' bid submissions, making it impossible for the DIR to conduct a thorough review of this procurement process. For example, the DIR was unable to evaluate the propriety of the BEC's decision to declare 16 of the 20 companies' bids non-responsive.<sup>90</sup> As a result of that decision, the BEC excluded the lowest bidders in all but one of the bidding processes. On six of those occasions, Novartis was the lowest bidder but was excluded for purportedly failing to submit or correctly execute the bidding documents.<sup>91</sup> The lack of documentation also prevented the DIR from understanding fully the BEC's decision to declare that *all* of the bids for two contracts (relating to PC1 and PC5) were non-responsive.<sup>92</sup>

The documentation was sufficient to determine that Pure Pharma submitted bids relating to 10 of the 13 PCs and Nestor bid on seven of the PCs.<sup>93</sup> Table 7 demonstrates that Nestor and Pure Pharma quoted unit prices that were less than one percent apart across three of the six product codes for which they competed, and submitted *identical* prices for PC10.<sup>94</sup>

**Table 7. Nestor and Pure Pharma Unit Prices for the 2000 Tender (Prices in INR)**

Company	PC1	PC2	PC3	PC4	PC5	PC6	PC9	PC10	PC11	PC12	PC13
Pure Pharma Limited	322.11	589.41	284.31	473.31	3.06		51.66	12.22	1.8	19.71	19.71
Nestor Pharmaceuticals Limited		584.48	277.24			8.84	51.98	12.22	1.78		19.98
% Difference in Unit Prices		0.84%	2.49%				0.62%	0.00%	1.11%		1.35%

<sup>90</sup> See 2000 BER, pp. 8–33.

<sup>91</sup> *Ibid.*, pp. 14–15.

<sup>92</sup> *Ibid.*, p. 30. To ensure that the TCP would not be hampered by the failure to have certain drugs available, the two smaller contracts for PC1 and PC5 were subsequently awarded following clarification being sought from these companies. See MECON letter to World Bank (Oct. 14, 2000); see also BER for Pharmaceuticals and Vaccines for RNTCP (ICB) PCs 1 and 5.

<sup>93</sup> Citing the company's deregistration and its failure to provide a number of required documents, the BEC again declared Pure Pharma to be non-responsive, thereby excluding that company from consideration with respect to all of the PCs.

<sup>94</sup> The other bidders' unit prices for PC10 during the 2000 tender ranged from INR 10.8 to 15.38 (USD 0.24 to 0.34). See 2000 BER, pp. 17–33. Paragraph 6 of the Jul. 9, 2007, Decision of the Sanctions Board on the RCH investigation considered as particularly compelling the evidence relating to an incident of identical pricing between Nestor and Pure Pharma, finding that they had failed to provide adequate explanation for this incident and that the evidence supported the conclusion that it was more likely than not that Nestor and Pure Pharma had engaged in collusive practices.

### *3. The 2001 Tender*

Table 8 summarizes the bids submitted by all of the prospective suppliers under the 2001 pharmaceutical tender (the 2001 tender, IFB-MECON-RNC-PRMT-RN-TCP-2001-03) and illustrates the bid price range for each PC, the winning bidder, the companies that were declared non-responsive, and individual contract values in USD.

Table 8. Outcome of Bidding Process and Unit Prices for the 2001 Tender (Prices in INR)

Company	PC1	PC2	PC3	PC4	PC5	PC6	PC10	PC11	Total Awarded (USD)
Lupin Limited	276.00	485.00	244.00	425.00		8.22	9.30	3.52	4,146,365
Pure Pharma Limited		482.31					10.65	1.68	1,661,439
Vysali Pharmaceuticals Limited					3.08				367,646
Macleods Pharmaceuticals Limited	296.64	518.00	261.77	419.77		6.46	11.16	2.40	121,492
Novartis India Limited	305.65	533.00		420.00		6.00		2.50	53,860
Biological E. Limited							10.80	2.51	
Cadila Healthcare Limited	344.62	586.00	296.37	473.32		8.84	11.60	2.72	
Concept Pharmaceuticals Limited	318.34	567.48	268.74	487.84					
Cosy Pharmaceuticals Pvt. Ltd.				488.00		6.64		1.74	
Flamingo Pharmaceuticals Ltd.					5.15	9.87	11.42	2.82	
Hindustan Antibiotics Limited					3.10	8.20	10.20		
Karnataka Antibiotics & Pharmaceuticals Limited					3.35				
Lyka Labs Limited	309.71	559.49	269.36	441.69		6.69	12.37		
Maneesh Pharmaceuticals Pvt. Ltd.							10.80	1.80	
Nestor Pharmaceuticals Limited	264.00	502.00	234.00	398.00				1.72	
Themis Medicare							10.90		
Value of Contracts (USD)	2,201,173	1,570,124	1,506,553	121,492	367,646	53,860	438,639	91,315	6,350,802
Contract awardees									
Non-responsive bidders									

The DIR did not note any indicators of collusion in connection with the 2001 tender. However, the DIR did discover that on July 17, 2001, the BEC recommended Nestor as the winner of three of the six lots for which it had bid,<sup>95</sup> despite the fact that, in a letter dated June 18, 2001, the CTD had informed MECON that Nestor had provided substandard antituberculosis drugs to the GMSD in Kolkata, resulting in the company being deregistered as a provider of pyrazinamide 750 mg.<sup>96</sup> As a result, after the CTD apparently reminded the BEC of its earlier letter, the BEC declared Nestor's bids for PCs 1, 3, and 4 (which required pyrazinamide) non-responsive, even though Nestor was the lowest bidder for those PCs.<sup>97</sup>

As reflected in Table 9, below, had the CTD not rejected the BEC's initial recommendation, Nestor would likely have won contracts worth USD 3.8 million, amounting to 60 percent of the contracts issued under the 2001 tender.

**Table 9. Nestor and Pure Pharma's Actual Versus Likely Awards in the Absence of Deregistration for the 2001 Tender**

Company	Likely			Actual		
	Number of Contracts	Amount of Contracts (USD) <sup>a</sup>	Share of Total Value Awarded (%)	Number of Contracts	Amount of Contracts (USD) <sup>a</sup>	Share of Total Value Awarded (%)
Nestor Pharmaceuticals Limited	3	3,829,215	60	0	0	0
Pure Pharma Limited	2	1,661,439	26	2	1,661,439	26
Lupin Limited	1	426,250	7	3	4,146,364	65
Vysali Pharmaceuticals Limited	1	367,646	6	1	367,646	6
Novartis	1	53,860	1	1	53,861	1
Macleods Pharmaceuticals Limited				1	121,491	2

<sup>a</sup> For comparison purposes, prices include taxes.

<sup>95</sup> See 2001 BER.

<sup>96</sup> See CTB letter to MECON (Jun. 18, 2001).

<sup>97</sup> See MECON letter to CTB (Sept. 4, 2001). MECON's letter refers to an August 30, 2001, letter from CTB to MECON, but the DIR was unable to locate a copy of that letter.

#### *4. The 2002 Tender*

In connection with the 2002 pharmaceutical tender (the 2002 tender, IFB-MECON-RNC-RNTCP-2002-06), Nestor and Pure Pharma submitted bids for PCs 1–4, 9, and 11, and Nestor also bid on PC10. Table 10 summarizes the bids submitted by all of the prospective suppliers under the 2002 tender and illustrates the bid price range for each PC, the winning bidder, the companies that were declared non-responsive, and individual contract values in USD.

Table 10. Outcome of Bidding Process and Unit Prices for the 2002 Tender (Prices in INR)

Company	PC1		PC2		PC3		PC4		PC5		PC9		PC10		PC11		Total Awarded (USD)
	I	II	III	IV	V	VI	VII	VIII	IV	V	XI	XII	XIII	XIV	XV	XVI	
Novartis India Limited	253.75	253.75	466.85	466.85	220.81	220.81	351.9	351.9			38	38	10.7	10.7	2.65	2.65	4,690,655
Lupin Limited	269.75	269.75	480.78	480.78	232.88	232.88							9.99	9.99			909,920
Hindustan Antibiotics Limited									2.9	2.9							518,749
Nestor Pharmaceuticals Limited	234	234	432	432	198	198	348	348			35.9	35.9	10.48	10.48	1.61	1.61	149,836
Macleods Pharmaceuticals Limited	255.4	255.4	471.36	471.36	228.81	228.81	375	375			37	37	11.25	11.25	2.37	2.37	81,123
Brothers Pharma Private Limited															1.98	1.98	
Cadila Healthcare Limited															2.9	2.9	
Concept Pharmaceuticals Limited	259.9	259.9	477.8	477.8	229.95	229.95	383.6	383.6			40.2	40.2					
Endolabs Ltd.							435	435					10.872	10.872			
Jackson Laboratories Private Limited									3.48	3.48			8.8	8.8	1.68	1.68	
Maneesh Pharmaceuticals Pvt. Ltd.							358	358					10.3	10.3	1.75	1.75	
Pure Pharma Limited	236.7	232.2	429.3	435.6	199.8	196.2	342	342			36.9	36.9			1.6	1.62	
Vital Healthcare Private Limited									4.69	4.69							
Value of Contracts (USD)	1,060,887	845,032	722,507	691,411	728,391	555,614	49,762	37,050	291,556	227,192	42,995	38,128	482,258	427,662	79,413	70,423	6,350,283

Contract awardees  
Non-responsive bidders

Note: The BEC excluded Nestor and Pure Pharma from competing for all PCs except PCs 10 and 11 because pyrazinamide (the subject of Nestor's deregistration) and isoniazid (the subject of Pure Pharma's deregistration) were present in the PCs for which the companies were excluded. See 2002 BER Cover Letter, p. 2.

As reflected in Table 11, Pure Pharma's and Nestor's bid prices were within one percent of each other with respect to seven lots, and within three percent of each other on five other occasions.

**Table 11. Nestor and Pure Pharma Unit Prices for the 2002 Tender**  
(Prices in INR)

Company	PC1		PC2		PC3		PC4		PC9		PC11	
	I	II	III	IV	V	VI	VII	VIII	XI	XII	XV	XVI
Nestor Pharmaceuticals	234	234	432	432	198	198	348	348	35.94	35.94	1.61	1.61
Pure Pharma Limited	236.7	232.2	429.3	435.6	199.8	196.2	342	342	36.9	36.9	1.6	1.62
Average of all Bidders	251.58	250.83	459.68	460.73	218.38	217.78	370.5	370.5	37.594	37.594	2.06	2.07
Price Variation (%)	-1.2	0.8	0.6	-0.8	-0.9	0.9	1.7	1.7	-2.7	-2.7	0.6	-0.6

In addition to containing similar or identical unit prices, Nestor and Pure Pharma's bid prices would also have resulted in the splitting of lots had those companies underbid their competitors. Nestor and Pure Pharma submitted the lowest bid prices in connection with the lots associated with PCs 1–4, 9, and 11. As depicted in Table 11, the two companies' unit prices differed just enough to ensure that, had the companies not been excluded because of their deregistrations, they each would likely have won six lots under the 2002 tender.

However, the BEC excluded Nestor and Pure Pharma from competing for all PCs except PC10 and PC11 because pyrazinamide (for which Nestor was deregistered) and isoniazid (for which Pure Pharma was deregistered) were present in the PCs for which they were excluded.<sup>98</sup> As a result, Nestor won only two contracts, for a total of USD 149,836, and Pure Pharma did not win any contracts. As set forth in Table 12, had Nestor and Pure Pharma not been excluded, they would likely have won 79 percent of the lots for which they competed—for a total of USD 4.9 million—since those companies were otherwise the lowest qualified bidder for those lots.

<sup>98</sup> See 2002 BER Cover Letter, p. 2.

**Table 12. Nestor's and Pure Pharma's Actual Versus Likely Awards in the Absence of Deregistration in the 2002 Tender**

Company	Likely			Actual		
	Number of Product Codes Awarded	Amount (USD)	% of Total Amount Awarded	Number of Product Codes Awarded	Amount (USD)	% of Total Contracts
Novartis India Limited	0	0	0	8	4,690,655	74
Lupin Limited	2	909,920	15	2	909,920	14
Hindustan Antibiotics Limited	1	518,748	8	2	518,748	8
Nestor	6	2,632,231	42	2	149,836	2
Macleods Pharmaceuticals Limited	1	81,122	1	2	81,122	1
Pure Pharma	6	2,289,377	37	0	0	0
<b>Nestor/Pure Pharma Total</b>	<b>12</b>	<b>4,921,608</b>	<b>79</b>	<b>2</b>	<b>149,836</b>	<b>2</b>

### 5. The 2004 Tender

Nestor's and Pure Pharma's deregistrations figured most prominently during the 2004 TCP pharmaceutical tender (the 2004 tender, IFB-MECON-RNC-RN-TCP-2004-12), which initially involved 27 lots relating to nine PCs.<sup>99</sup> Table 13 summarizes the bids submitted by all of the prospective suppliers under the 2004 tender and illustrates the bid price range for each PC, the winning bidder, the companies that were declared non-responsive, and individual contract values in USD.

<sup>99</sup> These included PC1 (lots 1–5), PC2 (lots 6–10), PC3 (lots 11–15), PC4 (lots 16–17), PC6 (lots 23–24), PC7 (lots 25–26), PC8 (lots 27–28), PC10 (lots 29–39), and PC11 (lots 31–32).

Table 13. Outcome of Bidding Process and Unit Prices for the 2004 Tender (Prices in INR)

Company	PC1					PC2					PC3				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Nestor Pharmaceuticals Limited	274	274	274	274		488	488	488	488		222	222	222	222	
Lupin Limited	355.36	355.36	355.36	355.36	355.36	706.99	706.99	706.99	706.99	706.99	303.44	303.44	303.44	303.44	303.44
Novartis India Limited	347.99	347.99	347.99	347.99	347.99						308.04	308.04	308.04	308.04	308.04
Micro labs Limited															
Ajanta Pharma Limited															
Maan Pharmaceuticals Limited															
Macleods Pharmaceuticals Limited						Not open									
Pure Pharma Limited	969,213	801,325	790,365	796,593	1,022,866	663,680	524,378	522,604	525,265	766,278	598,189	488,198	487,996	487,996	674,559
Value of Contracts (USD)															

Table 13. Outcome of Bidding Process and Unit Prices for the 2004 Tender, continued (Prices in INR)

Company	PC4		PC6	PC7	PC8	PC10	PC10	PC10	PC11	Total Awarded (USD)			
	16	17	23	24	25	26	27	28	29	30	31	32	
Nestor Pharmaceuticals Limited	354	354							11.24	11.24	2.84	2.84	10,131,322
Lupin Limited	491.29	491.29							13.8	13.8			1,440,837
Novartis India Limited	437.83	437.83											1,022,866
Micro labs Limited			8.09	8.09	1.92	1.92	6.2	6.2	14.1	14.1	4.36		164,656
Ajanta Pharma Limited			8.3	8.3	1.41	1.41	4.62	4.62	12.41	12.41			89,107
Maan Pharmaceuticals Limited			8.9	8.6	1.75	1.75	5.8	5.7	11.7	11.7	3.4	3.3	
Macleods Pharmaceuticals Limited	Not open	Not open	Not open		Not open		Not open	Not open	Not open	Not open	Not open	Not open	
Pure Pharma Limited													
Value of Contracts (USD)	34,756	140,956	24,290	140,365	4,304	59,900	4,248	20,655	314,274	1,666,142	79,407	239,983	

Contract awardees

Non-responsive bidders

Contract not financed by WB

In June 2003, companies were required to pre-qualify for participation in the 2004 tender.<sup>100</sup>

*Pure Pharma's Attempts to Bid.* Pure Pharma was pre-qualified to participate in lots 6 to 10 (PC2), 23 (PC6), 25 (PC7), and 27 (PC8). Notably—because the MOHFW's registry is not publicly available—the Bank gave its no-objection to Pure Pharma's pre-qualification, despite the fact that the company was in the midst of a deregistration period extending from December 10, 2002, through December 10, 2005, and was precluded from providing isoniazid 300 mg during that period. Isoniazid was an essential element of PC2 and PC7.

*Nestor's Attempts to Bid.* According to the Bank's internal documentation,<sup>101</sup> Nestor was not pre-qualified to bid for certain elements of the 2004 tender because the company was in the midst of a three-year deregistration period prohibiting it from supplying pyrazinamide 750 mg, which was a required element of many lots in the tender.<sup>102</sup>

After receiving the final list of pre-qualified companies, the Bank gave its no-objection to Nestor's participation in lots 29 through 32 because those lots did not include pyrazinamide,<sup>103</sup> but refused to accept MECON's inclusion of Nestor in the group of companies who could compete for lots in which pyrazinamide was required.<sup>104</sup> Nevertheless, Nestor submitted bids for multiple lots requiring pyrazinamide, and filed a writ petition with an Indian court, seeking an order requiring the BEC to consider those bids.

*The Contract Awards.* The BEC's initial conclusions—which were made while Nestor's court petition was pending—were ambiguous. The BEC analyzed and chose winners for the 13 lots for which neither Pure Pharma nor Nestor submitted bids (lots 5, 15, and 23–32).<sup>105</sup> With respect to the lots for which Pure Pharma and Nestor submitted bids despite their deregistration, the BEC prepared two different comparison tables (one including the bids of those companies, the other without

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<sup>100</sup> Application for Pre-Qualification of Bidders No. MECON/RNC/PRMT/RNTCP/2003/08 (Jun. 1, 2003). Prequalification ensures that invitations to bid are extended only to those companies that have adequate capabilities and resources. Paragraph 2.9 of the Bank's Procurement Guidelines provides that “[p]requalification shall be based entirely upon the capability and resources of prospective bidders to perform the particular contract satisfactorily, taking into account their (1) experience and past performance on similar contracts, (2) capabilities with respect to personnel, equipment, and construction or manufacturing facilities, and (3) financial position.”

<sup>101</sup> Rachid Benmessaoud (World Bank) fax to CTB (Jul. 5, 2004).

<sup>102</sup> These included PCs 1 (lots 1–5), 2 (lots 6–10), 3 (lots 11–15), and 4 (lots 16 and 17).

<sup>103</sup> Rachid Benmessaoud (World Bank Group) fax to CTB (Jul. 5, 2004).

<sup>104</sup> World Bank fax to CTB (Sep. 23, 2004).

<sup>105</sup> 2004 BER, p. 10.

them) and determined what the outcome would be under each scenario.<sup>106</sup> The BEC recognized that accepting Pure Pharma's and Nestor's bids would save the government INR 125 million (around USD 2.8 million), but ultimately did not recommend winners for any of those contracts.<sup>107</sup>

On January 25, 2005, the High Court of New Delhi granted Nestor's petition, allowing the company to submit bids for all of the lots it had identified in its pre-qualification submission.<sup>108</sup> On February 25, 2005, MECON sent a letter to the Bank explaining that the MOHFW had decided to accept Nestor's bids, and requesting the Bank's no-objection to the decision to award Nestor 17 of the 2004 tender's 23 contracts.<sup>109</sup>

Regarding lot 10, for which Pure Pharma was the lowest bidder, the Ministry delayed a decision pending the results of tests that were being conducting in Kolkata. On March 5, 2005, MECON informed the Bank that Pure Pharma's products had failed the tests, leading to a decision to exclude Pure Pharma's bid and award the contract to the next lowest evaluated bidder.<sup>110</sup>

On April 25, the Bank objected to the award of lots 1–4, 6–9, 11–14, 16, and 17, which MECON had proposed awarding to Nestor, despite the fact that that company was not pre-qualified.<sup>111</sup> In light of the conflict between the court's ruling (that the MOHFW was required to accept Nestor's bids) and the Bank's objection, the MOHFW decided simply to cancel the tender relating to those lots and to procure the items according to WHO rules.<sup>112</sup> The Bank gave its no-objection to the cancellation.<sup>113</sup>

In the end, Nestor won two contracts (for lots 29–32, which did not require pyrazinamide), worth a total of USD 2.3 million. Had the additional proposed awards not been opposed, Nestor would most likely have won an additional 14 contracts, worth a total of USD 7.8 million.

## 6. Overall Likely Impact of Deregistrations

There is a stark difference between the volume of Nestor's and Pure Pharma's *actual* contract awards and the volume of contracts those companies would likely

<sup>106</sup> *Ibid.*

<sup>107</sup> *Ibid.*, p. 11.

<sup>108</sup> MECON letter to World Bank (Feb. 25, 2005), p. 3.

<sup>109</sup> MECON letter to World Bank (Feb. 25, 2005).

<sup>110</sup> MECON letter to World Bank (Mar. 5, 2005).

<sup>111</sup> World Bank letter to CTB (Apr. 25, 2005).

<sup>112</sup> MOHFW letter to R. Benmessaoïd, World Bank (Jul. 14, 2005).

<sup>113</sup> World Bank letter to CTB (Aug. 18, 2005).

have won had they not been deregistered (*i.e.*, the instances in which the companies were the lowest qualified bidder, except for the fact of deregistration).

The situation involving Pure Pharma and Nestor might be viewed as an example in which—despite the failure to recognize indicators of collusion—certain controls may have prevented a possible collusive scheme from flourishing.

## **B. Review of Implementation**

The DIR analyzed the project's supply and distribution chain for indicators that the goods were unaccounted for, undelivered, or of a lesser quality than what was required by the applicable contracts. In accordance with its methodology, the DIR chose a sample of locations in the states of Maharashtra, Uttar Pradesh, Karnataka, and Chhattisgarh.

### *1. Review of Pharmaceuticals Supply and Distribution Chain*

Using consignee lists obtained from the bidding documents and, later, revised lists provided by the CTD and additional documentation obtained during field visits, the DIR visited State Drug Stores, treatment units, and the other locations described above and did not observe any significant deviations between the quantities of pharmaceuticals specified in the contracts and the quantity actually delivered.

The DIR examined the internal supply chain (*i.e.*, the project's distribution of drugs from the contract consignee to patients) and observed that at the GMSD, state, and district level, adequate records were generally maintained and reflected the proper receipt and dispatch of stock to the intended delivery points. Below the level of the district stores (*i.e.*, distribution from the district stores to treatment units and DOTS centers, which are usually located in small, local primary health centers), the quality of the recording systems varied among states and districts, and accurate records were not always maintained. However, the DIR generally found comprehensive patient registers and patient cards showing drugs actually being delivered to end users as intended.

### *2. Quality Testing of Pharmaceuticals*

During the implementation of the TCP, the procurement agents were responsible for ensuring that pre-delivery tests were conducted. Although the GMSD provided the DIR with copies of "Inspection certificate-cum-dispatch clearance" letters from MECON, which refer to sample testing having been undertaken,

no documentation of the tests was provided to DIR, despite a specific request to MECON for such documentation.<sup>114</sup>

The DIR obtained drug samples relating to contracts issued under the 2002 and 2004 tenders and commissioned SGS Nederland B.V (SGS) to conduct independent laboratory testing of the collected samples. The DIR selected the samples from shelves in state and district stores and from bulk storage at the GMSD in Mumbai. With respect to the 2002 tender, samples of pharmaceuticals provided by Hindustan Laboratories (PC5), Lupin (PC10), and Nestor (PC11) were collected from the states of Maharashtra and Karnataka.<sup>115</sup> With regard to the 2004 tender, samples of pharmaceuticals (PCs 6, 7, 8, 10, and 11) supplied by Microlabs, Ajanta Pharma, and Nestor were collected from the states of Raipur, Mumbai, Thane, and Nagpur.<sup>116</sup>

SGS applied the India Pharmacopoeia 2006 protocol, including description, identification, average weight, uniformity of weight, dissolution (by ultraviolet light), and assay (by titration). All of those samples complied with the applicable contractual specifications.

## Equipment

Procurement of equipment through ICB represented only about USD 3.2 million of the total funds spent under the TCP. It was composed of three tenders for binocular microscopes and one tender for LCD projectors, resulting in:

- A USD 1.8 million contract awarded to Light Instruments in 1999 to supply binocular microscopes
- A USD 0.8 million contract awarded to NK Jain Instruments in 2000 to supply binocular microscopes
- A USD 0.5 million contract awarded to Olympus in 2002 to supply binocular microscopes

<sup>114</sup> In addition, the DIR found no documented communications between TCP procurement agents and the MSO. Considering the MSO's important role in registering and controlling drug manufacturers, there would almost certainly be value in the MSO receiving and reviewing test results as well as providing greater transparency in the testing process.

<sup>115</sup> The samples were taken from the GMSD Mumbai; Mumbai District TB Control Society; Thane District Office Store; Mandya General Hospital; and Janyanagar General Hospital.

<sup>116</sup> The samples were taken from the GMSD, the State Drug Stores, and district treatment centers and treatment units.

- A USD 0.07 million contract awarded to HCL Infinet Ltd. in 2004 to supply LCD projectors.

### **A. Review of Procurement**

The DIR reviewed the bids, bid evaluation reports, and other documentation relating to each of the four tenders. The DIR analyzed those documents for indicators of collusion, bid rigging, improper exclusion from the bid process, and other forms of fraud or corruption. The DIR did not identify any indicators of fraud or corruption in connection with the procurement processes relating to the equipment at issue.

### **B. Review of Implementation**

Based on consignee lists and other information obtained by the DIR, the DIR did not identify any indicators calling into question the quantity or quality of equipment supplied under the TCP contracts under review. The DIR traced the delivery of microscopes to the user level (microscopy centers). Based on an examination of the equipment and discussions with the end users, the DIR found the equipment fit for its intended purpose. The DIR also found that LCD projectors were delivered as stated on the revised consignee list and were meeting user requirements.

The DIR did not receive any substantial complaints from RNTCP operational staff regarding the performance of the equipment provided under the contracts. Problems with using the equipment were generally attributed to a difficult operating environment in which frequent power fluctuations sometimes cause equipment to malfunction.

## **Locally Procured Contracts**

Local shopping is particularly conducive to creating an environment where companies can collude, because companies were invited by the DTO to submit quotations, thereby limiting competition from the outset. The likelihood of fraud and collusion is further heightened because of the relatively small value of the contracts, which typically fall below the threshold for the Bank's prior review, and which, because of the high volume of such contracts and their geographical dispersion, are extremely difficult to supervise and post-review. The DIR reviewed locally procured contracts because in the follow-up project to the TCP it is anticipated that a significant portion of project funds will be allowed to be spent on local procurement.

DIR findings in both Maharashtra and Karnataka indicate an elevated risk to local procurement funds. This risk appears to have gone undetected by the Bank's traditional supervision methods and procurement post-reviews. The patterns of indicators of collusion, fraud, and corruption discovered in Maharashtra and Karnataka were very similar and included indicators of collusive practices among bidders and indicators of corrupt behavior between bidders and procurement officials.

Table 14 summarizes the number and value of the contracts reviewed by the DIR in each district, the number and value of contracts in each district that were associated with indicators of fraud or corruption, and the overall percentage of such contracts in terms of both number and value, as compared with the universe of contracts reviewed.

**Table 14. Summary of DIR Review of Locally Procured Contracts**

District	Contracts Reviewed	Value (INR)	Contracts with Indicators	Value Contracts with Indicators (INR)	% Reviewed in Number	% Reviewed in Value
Pune	45	1,778,518	22	1,063,487	49	60
Bangalore City	50	1,919,867	35	1,424,662	70	74
Bangalore Rural	42	2,116,649	38	1,985,474	90	94
Bangalore KSTCS	6	589,150	5	490,300	83	83
Total	143	6,404,184	100	4,963,923	70	78

Table 15 summarizes the types of indicators observed by the DIR in the various states and districts, and the number of instances in which such indicators were observed in each location, followed by a more detailed discussion of the contracts relating to each location.

**Table 15. Summary of Indicators of Fraud and Corruption in Locally Procured Contracts**

Indicator	State	Number of Districts	Total Number of Contracts
Strong similarities between competing bids' language and/or presentation	Karnataka	3	66
	Maharashtra	1	
The unit rate of bidders is related to a common formula	Karnataka	2	17
Separate bidders, identical phone number in same contract	Karnataka	3	15
	Maharashtra	1	
Incorrect method of procurement	Karnataka	2	14
Endemic recordkeeping failures—missing docs ( <i>e.g.</i> , BER)	Karnataka	2	11
Separate bidders, same address	Karnataka	2	7
Contract awarded to bidder who is different from the lowest evaluated bidder	Karnataka	2	5
Bidder receives overwhelming majority of contracts it applies for	Maharashtra	1	5
Favorable treatment of specific/winning bidder: <i>e.g.</i> , winning bid received/opened after losing bids, losing bids late	Karnataka	1	4
Tampering of documents ( <i>e.g.</i> , bids, BER) to favor specific bidder(s)	Karnataka	1	3
	Maharashtra	1	
Specifications that are so general that they do not aid objective review	Karnataka	1	3
Lack of competitive bid procedure due to insufficient bidders	Karnataka	1	2
Bids are accepted after the submission deadline	Karnataka	1	2
	Maharashtra	1	2
Unreasonable delays in evaluating the bids and selecting the winner	Karnataka	1	1
Substantial recordkeeping deficiencies in contract administration documents	Karnataka	1	1
Substantial disparity between the thoroughness of the winning bidders' bid package and losing bids	Karnataka	1	1
Narrow specifications appear to favor a specific product or manufacturer	Karnataka	1	1
Items, not originally in tender/bids, added to winning contract, increasing substantially contract value	Karnataka	1	1
Existence of cartel is acknowledged or reported	Karnataka	1	1
Excessive time elapsed between evaluation and contract award	Karnataka	1	1
Competing bids use identical terms that are not specified in bidding documents	Karnataka	1	1

## A. Pune, Maharashtra

The DIR found indicators of fraudulent, corrupt, or collusive practices in 22 out of 45 contracts reviewed in Pune, for a total value of INR 1,063,487 (USD 23,633), representing 60 percent of the total value of the Pune contracts. Table 16 describes the frequency of observed indicators.

**Table 16. Frequency of Observed Indicators in Pune**

Indicator	Frequency of Indicator
Strong similarities between competing bids' language and/or presentation	18
Bidder receives overwhelming majority of contracts it applies for	5
Separate bidders, identical phone number in same contract	2
Tampering of documents (BER, bids, etc.) to favor a specific bidder	1
Bids are accepted after the submission deadline	1
The unit rates of bidders is related to a common formula	1

The DIR observed multiple indicators associated with some contracts.

### 1. *Indicators of Collusion or Bid Rigging*

In Pune, the DIR identified many indicators of collusive agreements entered into for the purpose of sharing the award of contracts. The following sections describe specific practices and provide examples of those indicators of collusion.

*Strong Similarities in Competing Bids' Language/Presentation.* One practice or event suggesting collusive bidding or price-fixing among competitors is the appearance of identical formatting, calculations, spelling errors, or abbreviation form in two or more competitive bids. This indicator was present in 18 of the 45 Pune contracts reviewed by the DIR, with a total value of INR 818,072 (USD 18,179). These indicators were present in contracts for printing services;<sup>117</sup> for civil works;<sup>118</sup> and for providing pamphlets and stickers,<sup>119</sup> disposable syringes and needles,<sup>120</sup> eye pieces,<sup>121</sup> and banners.<sup>122</sup>

<sup>117</sup> World Bank Contract Numbers (WBCNs) 14146, 11338, 10835, 14308, 14604, 13109, 14040, 12162, and 13135.

<sup>118</sup> WBCNs 13025 and 12914.

<sup>119</sup> WBCNs 10837 and 11610.

<sup>120</sup> WBCNs 11135 and 12557.

<sup>121</sup> WBCNs 11807 and 12555.

<sup>122</sup> WBCN 11379.

For example, with respect to contracts awarded to Bhakti Enterprises to supply disposable syringes and needle contracts (World Bank Contract Numbers [WBCNs] 11135 and 12557),<sup>123</sup> the DIR observed similarities in the bids of Siddhi Surgicals, Bhakti Enterprises, and M.M. Suppliers. Siddhi Surgicals and M.M. Suppliers both used an equals sign between the main amount and the decimals, e.g., “4=15” instead of 4.15. Quotations of Siddhi Surgicals and M.M. Suppliers misspelled “disposable” as “dispocable.” Bhakti Enterprises and Siddhi Surgicals submitted handwritten quotations with an introductory sentence ending with “we quote our lowest rates” and the same closing sentence: “Thanking you, Yours faithfully.”

*Separate Bidders with the Same Phone Number Bid under the Same Contract.* The DIR found that Tirupati Sales Corporation Mumbai and Balaji Surgical shared the same phone number, 6239195, indicated on Tirupati Sales’ letterhead and Balaji’s envelope. WBCNs 14214 and 10412 were awarded to Tirupati Sales and were valued at INR 46,800 (USD 1,040), equal to 2.6 percent of the value of all 45 Pune contracts reviewed.<sup>124</sup>

*Unit Rates of Bidders Were Related to a Common Formula.* The DIR observed prices quoted by bidders that appeared to be related to a common formula. One Pune contract awarded to Sarvesh Distributors, valued at INR 24,300 (USD 540), showed this indicator.<sup>125</sup> Table 17 shows that all quotations on that contract were in the range of ±INR 4 from each other (Sarvesh Distributors, INR 108; Global Laboratories and Labline Stock Center, INR 112; and Supreme, INR 116).

**Table 17. Unit Rates of Bidders**

WBCN	Contract Date	Contract Description	Contract Amount	Companies	Amount Quoted (INR)	Ranking
14491	December 27, 2000	Sulfuric acid	24,300	Sarvesh Distributors	108	Contractor
				Labline Stock Center	112	2nd lowest
				Global Laboratories	112	2nd lowest
				Supreme Scientific Co.	116	3rd lowest

<sup>123</sup> World Bank Contract Number (WBCN): The DIR assigned to all contracts inputted or imported into the DIR database a WBCN that, in combination with the project acronym, is a unique and standard identifier for each contract.

<sup>124</sup> The DIR also observed that these two companies were linked to another company, Star Diagnostic Vasai, and that these companies participated in other contracts under the World Bank-funded NACP II in Nashik and Nagpur. Refer to NACP II WBCNs 10354, 12886, and 14354.

<sup>125</sup> WBCN 14491.

## 2. Indicators of Fraudulent and Corrupt Practices

In addition to collusion indicators, the DIR found indicators of the presence of or enhanced potential for fraud at various stages in the contract award process. Indicators of fraudulent activity in Pune were:

*Potential Tampering of Documents.* The DIR found handmade corrections to an item price on a quotation submitted by Ganesh Printers for a contract ultimately awarded to Nandanvan Enterprises.<sup>126</sup> The amount initially quoted by Ganesh was INR 65, but was modified to INR 69, while Nandanvan Enterprises quoted INR 65 for this item and was awarded that contract. The lack of notations or initials by this change indicates the possibility of tampering.

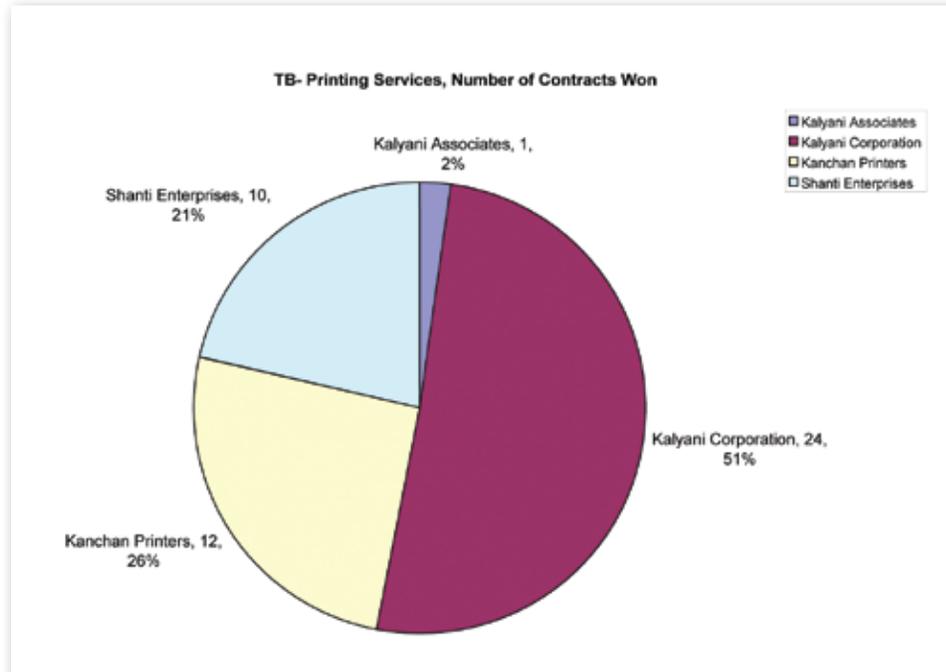
*Quotations Accepted after Submission Deadline.* The DIR found an instance where quotations were submitted and accepted by the BEC after the submission deadline. The review team identified this indicator in one contract, valued at INR 198,615 (USD 4,414), which is equivalent to 11.17 percent of the value of all 45 contracts reviewed, and 18.7 percent of the 21 contracts with identified indicators.<sup>127</sup> In this instance, P.P. & Company's quotation was dated February 2, 2000, Pradeep Satalkar's February 4, and Dabhade Brothers' February 5, while the request for proposals established a deadline of February 1. No date or time stamp or register of bid receipt was found.

*Company Winning the Overwhelming Majority of Contracts Sought Contract Splitting.* In Pune, from 1999 to 2002, two affiliated companies, Kalyani Corporation and Kalyani Associates, won the majority of RNTCP printing contracts in Pune (Figure 3). Between November 2003 and March 2005, two companies—Max Computers and Nandanvan Enterprises—were awarded all printing contracts. From 1999 to 2002, 47 printing contracts valued at INR 947,714 (USD 21,060) were awarded. The review team analyzed 22 of the 47 contracts<sup>128</sup> and observed that two companies, Kalyani Corporation and Kalyani Associates, were linked through the same principal, Galada Goutam Manikchand. Kalyani Corporation won 24 contracts, equal to 51 percent of the total number of contracts, and Kalyani Associates won one contract, on April 23, 2002. Combined, these two companies won 53 percent of the number of contracts awarded.

<sup>126</sup> WBCN 11379.

<sup>127</sup> WBCN 10149.

<sup>128</sup> The review team analyzed WBCNs 11643, 12790, 11288, 10929, 14115, 12162, 14318, 13026, 10243, 11865, 12169, 10562, 11418, 12485, 13692, 10102, 13109, 13809, 10912, 12626, 13135, and 14040.

**Figure 3. Distribution of Award of Printing Contracts, 1999 to 2002**

The DIR observed that 38 printing contracts were awarded between November 2003 and March 2005, valued at INR 470,333 (USD 10,452). The DIR analyzed these contracts and observed that two companies, Max Computers and Nandanvan Enterprises, were awarded all printing contracts. It appears that Max Computers competed for 14 printing contracts and won all 14. These contracts were worth INR 232,800 (USD 5,173), equal to 13 percent of the value of the 45 Pune contracts reviewed and to 21.9 percent of the 22 contracts with indicators.

The DIR closely examined five of the 14 contracts awarded to Max Computers.<sup>129</sup> The DTO apparently issued one request for quotations for 17 different items. According to the evaluation sheet, Max Computers was the lowest bidder on 14 items, equal to other bidders on two items, and higher bidder on one. Max Computers was the selected contractor for all items, indicating the possibility of preferential treatment. All contracts were under the Government of India guideline threshold of INR 25,000, the value that would have required higher approval authority.<sup>130</sup> Contract splitting is an indicator of the intention to avoid incurring higher thresholds and possibly the review of higher authority. The DIR review team also found evidence that Max Computers instructed the DTO by letter that ongoing and future printing contracts awarded to Max Computers would be executed

<sup>129</sup> WBCNs 14146, 14308, 11338, 10835, and 14604.

<sup>130</sup> As explained by the DTO during document review on March 12, 2007.

and paid to Nandanvan Enterprises.<sup>131</sup> Nandanvan Enterprises submitted quotations for 13 contracts and apparently was awarded all 13.

From 2003 to 2005, none of the companies that competed in the previous procurement period participated in tenders; an entirely new group of companies were solicited for quotes. Among those solicited, only Max Computers and Nandanvan were awarded contracts. Max Computers specifically indicated that Nandanvan would operate on its behalf, and after July 2004 Max did not bid for any more contracts. Nandanvan won all contracts for which it bid, and a number of other companies competed from 2003 to 2005 but never won.<sup>132</sup>

### *3. Inability of the Bank's Procurement Post-Review to Identify Fraud Indicators*

The DIR did not analyze the contracts reviewed by the Bank's procurement post-review. However, the DIR analyzed one contract that was previously reviewed during procurement post-review.<sup>133</sup> The Bank's post-review did not raise any observations, while the DIR review team identified the fraud indicator of strong similarities between competing bids.

## **B. Bangalore, Karnataka—Bangalore City**

The DIR segmented its local contract review in Bangalore, Karnataka, according to the three districts examined: Bangalore City (Bangalore Mahanagara Palike), Bangalore Rural, and Bangalore KSTCS (the Karnataka State Tuberculosis Control Society). Table 18 shows that the DIR reviewed procurement documents on 98 Bangalore contracts, mostly local shopping, procured at the state and district level.

<sup>131</sup> A letter written by Max Computers to the Pune DTO dated March 2, 2004, may provide an explanation. In that letter, Max Computers referred to an existing rate contract with the Pune District Tuberculosis Control Society. The letter informs project authorities that Max Computers “will work under the name of” Nandanvan Enterprises and that all future printing orders and payments should be made to Nandanvan Enterprises “under the same terms and conditions of running rate contract.” The fact that the Pune DTO was employing the rate contract procurement method while attempting to comply with Bank local shopping procedures may also explain why the DIR observed a high incidence of quotations with indicators of fraud and collusion. If the DTO had agreed to award Max Computers all printing contracts for that year at an agreed rate, it would still be necessary, under Bank procurement guidelines, to file three quotations to justify the repetitive award to Max Computers. It is possible therefore that Max Computers would have provided all three quotations themselves, or at least had an arrangement with two other companies for them to provide higher quotes.

<sup>132</sup> These companies were Taurus Comp. Printers, Omkar Printers, Sai Printers, Rakhi Arts, Global Enterprises, Skypak Enterprises, Arun Printers, Ganesh Graphics, Sunrise Printers, Omkar Enterprises, A.V. Prints, Ganesh Print, Vijay Mudranalaya, Vijay Printers, and Siddharth Printers. These companies are not represented in the figure.

<sup>133</sup> WBCN 13025, dated August 23, 2004, for the execution of “Upgradation of DTC,” civil works of The District Tuberculosis Center, in the amount of INR 188,122.00 (USD 4,180), was awarded to contractor Sarang V. Dhahiwal.

**Table 18. TCP Local Shopping Contracts Reviewed in Bangalore**

State	District	Total Contracts Reviewed	Amount (INR)	Equivalent in USD
Karnataka	Bangalore Rural	42	2,116,649	47,037
Karnataka	Bangalore City	50	1,919,867	42,664
Karnataka	Bangalore KSTCS	6	589,150	13,092
Total		98	4,625,666	102,793

The DIR found deficient and inaccurate procurement data pertaining to Bangalore. The project provided incomplete or incorrect initial data with respect to contract amount, bidder names, and winning bidders. Initially, the Karnataka State Tuberculosis Control Society in Bangalore did not provide any data to the Department of Institutional Integrity (INT). Later, a spreadsheet was obtained during the DIR's stay in Bangalore.

Meetings with project staff for Bangalore City, also called Bangalore Mahanagara Palike, revealed that only local shopping procedures were used to procure goods. The team reviewed 50 Bangalore City contracts, valued at INR 1,919,867 (USD 42,664).<sup>134</sup> Of those contracts, 35 were found to have one or more indicators of fraud or corruption, for a total value of INR 1,424,662 (approximately equivalent to USD 31,659), roughly 74 percent of the total value of Bangalore City contracts. The frequency of indicators found in the contracts with indicators is shown in Table 19.

<sup>134</sup> At exchange rate USD 1/INR 45.

**Table 19. Frequency of Observed Indicators in Bangalore City**

Indicator	Frequency of Indicator
Strong similarities in competing bids' language and/or presentation	15
Incorrect method of procurement (e.g., single source instead of competitive)	10
The unit rates of bidders is related to a common formula	6
Endemic recordkeeping failures—missing documents (e.g., BER)	4
Specifications that are so general that they do not aid objective review	3
Contract awarded to bidder who is different from the lowest evaluated bidder	4
Separate bidders, identical phone number in same contract	2
Tampering of documents (e.g., bids, BER) to favor specific bidder(s)	2
Lack of competitive bid procedure due to insufficient bidders	2
Substantial recordkeeping deficiencies in contract administration documents	1
Items, not originally in tender/bids, added to winning contract, increasing substantially contract value	1
Bids are accepted after the submission deadline	1
Competing bids use identical terms that are not specified in bidding documents	1

Certain contracts were associated with more than one indicator.

### 1. *Indicators of Collusion or Bid Rigging*

For brevity, an exhaustive narrative of each local procurement indicating collusion or fraud is not included here. Rather, representative examples of specific procurements indicating collusion due to similarities in bids are as follows.

*Strong Similarities in Competing Bids' Language and/or Presentation.* In connection with the bidding for 15 contracts, quotations from different bidders had strong similarities. Those contracts had a total value of INR 634,110 (USD 14,091). These indicators were present in contracts for printing services<sup>135</sup>, and for supplying plastic cups,<sup>136</sup> books,<sup>137</sup> lab consumables,<sup>138</sup> and office furniture.<sup>139</sup>

<sup>135</sup> WBCNs 12571, 10062, 10969, 10429, and 10007.

<sup>136</sup> WBCN 10920.

<sup>137</sup> WBCN 10479.

<sup>138</sup> WBCNs 11066, 13688, and 12591. Missing RFQ in the file for these contracts inhibited full review by the team.

<sup>139</sup> WBCN 13836.

For example, the DIR observed indicators of collusion in connection with printing contracts awarded to P.V. Printers, V.N. Print Graphics, SS Printers, and Padmashree Printers.<sup>140</sup> Both P.V. Printers, which won contract WBCN 12571, and V.N. Print Graphics, which won contract WBCN 10062, misspelled “Quatation” and “Practioners” in their bid documents. The DIR also found that although P.V. Printers was the lowest bidder for certain items, V.N. Print Graphics was awarded both contracts for all items, supplied the items, and issued cash/credit bills for payment of both contracts.

In addition, V.N. Print Graphics, HiTech Graphic Prints, SS Printers, and Mahant Offset Printers used similar formats and language in their bids.<sup>141</sup> Similarities included misspelling “Yours” in the final salutation as “Your’s” or “Yours’s”; using two or three different fonts in the same quotation; all bidders indicating the quantity for items as “25[space]000 Cards” and two bidders describing an item 4 as “1 Set 465x 4 = 1860”; and photocopy marks indicating use of the same photocopy machine.

*Separate Bidders with the Same Phone Number Bid under the Same Contract.* The DIR also identified two instances where bidders were linked to the same phone number. These contracts were valued at INR 157,465 (USD 3,500). For instance, in the case of WBCN 13154, two companies, S.V. MediWorld and GK Sales, shared the same three phone numbers and e-mail address.

*Unit Rates of Bidders Were Related to a Common Formula.* The DIR observed instances where prices quoted by bidders appeared to be related to a common formula, an indicator of price collusion. The DIR identified this indicator in six contracts, valued at INR 257,400 (USD 5,720). One example of those six contracts is WBCN 12341, the bids for which are summarized in Table 20.

**Table 20. Summary of Bids for WBCN 12341**

Item/Company	Sputum Cup	Role
Ramnik Plastic	1.50	Contractor
Ashok Plastic Agency	1.75	Bidder
Polyplast Industries	2.00	Bidder

<sup>140</sup> WBCNs 12571, 10062, 10969, 10429, and 10007.

<sup>141</sup> WBCN 10007.

## 2. *Indicators of Fraudulent and Corrupt Practices*

*Awards without Competition.* The DIR found 10 contracts awarded without competition, with a total value of INR 457,120 (USD 10,158), equal to 23.8 percent of the value of the 50 contracts reviewed. In this circumstance, direct contracting is prohibited for the procurement of goods and works. Initial data indicated that five of the 10 contracts awarded without competition were procured through local shopping.<sup>142</sup> Yet, the actual documentation for these contracts consisted of direct purchase orders and sole source justifications, with no indication of competitive procedures. These apparent no-bid contracts may have violated the provisions of the credit agreement.<sup>143</sup>

*Awards Made without Adequate Documentation—Endemic Recordkeeping Failures.* The DIR observed four instances where key documents were missing. For example, the data provided on a printing contract award to Viking Printers (WBCN 10322) indicate that three bidders submitted quotations for this contract. This information could not be verified because of missing quotations from all bidders.

*Broad Contract Specifications Impeding Objective Review.* Bid specifications and statements of work are intended to provide bidders and the selecting officials with a firm basis for making and accepting bids. Carelessly written specifications encourage overcharging and under delivery. During its review, the team found numerous instances of general specifications that precluded objective review. For instance, the DIR found descriptions in a request for quotation (RFQ) for “1. Tables 10”; “2. Office Chairs 12”; “3. Plastic Chairs 40”; “4. Big Steel Almarah 20”; “5. Racks 10”.<sup>144</sup> No further specifications were indicated, such as measurements, material, or color, for any of the items. The losing bidders (AS Industries and Bangalore Urban District Supply & Marketing Co-Operative Society Ltd.) offered items with the same or very similar description, and the winning bidder, Sumukha House of Furnishing, offered items with different specifications. Only the winning bid contained copies of a catalogue showing the items offered, indicating that the broad RFQ language did not encourage competitive bids from the other bidders.

*Tampering of Documents to Favor Specific Bidders.* The DIR found instances of apparent alteration, backdating, or modification of bidding or contract documents. For instance, unit prices for quotations submitted by A.B. Enterprises and Chro-

<sup>142</sup> WBCNs 12831, 13625, 13866, 12049, and 14234.

<sup>143</sup> In other instances (WBCNs 10777 and 10855) the review team found that only two, rather than three, quotes were obtained prior to award.

<sup>144</sup> WBCN 13836.

mographics Offset and comparative sheets appear to have been modified. Chromographics Offset's unit rate was changed from INR 1.25 to INR 1.35 and total amount changed from INR 62,500 to INR 67,500. Bidder Modplast's rate of INR 1.30 was unchanged. The rate of the winning bidder, A.B. Enterprises, was changed from INR 1.45 to INR 1.25. The DIR found a second, separate quotation by A.B. Enterprises on file, issued on the same date as the other, but indicating a unit rate of INR 1.25. The DIR observed a number of cancellations with whitening liquid on the original comparative sheet, which were subsequently overwritten. Chromographics Offset's name was whited out and replaced with A.B. Enterprises. Also, by examining the comparison sheet against the light to identify words whited out, the DIR observed that the word "offset" of Chromographics Offset appeared clearly under the whited-out section at the end of the first line of comments.<sup>145</sup>

*Adding Items to Winning Contract after Contract Award.* Adding items to a contract post-award, particularly items that are beyond the scope of the original award, may indicate favoritism toward a contractor and therefore may indicate possible corruption. For example, in the case of WBCN 12017, the DIR observed that out of the total contract value of INR 68,150 (USD 1,514), an amount of INR 19,000 (USD 422), equal to 28 percent, was spent on one item, 500 boxes of micro slides. This item was not included in the original RFQ, or in the bidders' quotations, in the BER, or in the comparative statement. The supply order issued to the winning bidder, Karnataka Traders, indicates that 500 boxes of micro slides were added, at a cost of INR 38 per box, for a total amount of INR 19,000 (USD 422). The contract documentation does not contain any document, such as the file notes, justifying the addition of that item to the supply order issued to Karnataka Traders, nor the quantity or the price paid for such item.

*Contract Awarded to Bidder Other Than the Lowest Evaluated Bidder.* The DIR found that a printing contracts award resulted from one tender for three items.<sup>146</sup> P.V. Printers was selected to be awarded contract WBCN 12571 (two items) and V.N. Print Graphics was selected to be awarded contract WBCN 10062. Purchase committee meeting minutes suggest that two companies should have been awarded contracts. However, V.N. Print Graphics was awarded both contracts for all items tendered under these two contracts, and it supplied and issued cash/credit bills for payment of both contracts.

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<sup>145</sup> WBCN 10817.

<sup>146</sup> WBCN 12571 and 10062. The review team found that these contracts also had similarities between competing bids' language and/or presentation.

### C. Bangalore, Karnataka—Bangalore Rural

In Bangalore Rural, the DIR reviewed a total of 42 contracts, valued at INR 2,116,649 (approximately equivalent to USD 47,037). The DIR observed indicators of fraud or corruption in connection with 38 of the 42 contracts, with a total value of INR 2.0 million (USD 44,444) (approximately 94 percent of the total value of contracts in Bangalore Rural). The frequency of indicators found in the contracts is shown in Table 21.

**Table 21. Frequency of Observed Indicators in Bangalore Rural**

Indicator	Frequency of Indicator
Strong similarities in competing bids' language and/or presentation	32
The unit rates of bidders are related to a common formula	11
Separate bidders, identical phone number in same contract	7
Endemic recordkeeping failures—missing documents ( <i>e.g.</i> , BER)	7
Incorrect method of procurement: <i>e.g.</i> , single source instead of competitive bidding	4
Favorable treatment of a specific/winning bidder: <i>e.g.</i> , winning bid is received or opened after losing bids, losing bids received after evaluation of winning bid	4
Separate bidders, same address	3
Substantial disparity between the thoroughness of the winning bidders' bid package and losing bids	1
Narrow specifications appear to favor a specific product or manufacturer	1
Contract awarded to bidder who is different from the lowest evaluated bidder	1
Excessive time elapsed between evaluation and contract award	1
Unreasonable delays in evaluating the bids and selecting the winner	1

#### 1. Indicators of Collusion or Bid Rigging

*Strong Similarities in Competing Bids' Language and/or Presentation.* The DIR identified 32 contracts with strong similarities among quotations. The total value of these contracts was INR 1,527,946 (USD 33,954), equal to 72 percent of the value of all 42 contracts reviewed. Many of the same similarities discussed above with respect to Pune and Bangalore City were present in Bangalore Rural, and indicators were present in contracts for printing services<sup>147</sup> and for the supply

<sup>147</sup> WBCNs 10448, 11758, 10926, and 14059.

of laboratory consumables,<sup>148</sup> a computer,<sup>149</sup> wall paintings, computer peripherals, and computer software.

In a contract to provide electrical works, Sreyas Electricals, Radha Enterprises, and MER Machine & Equipment misspelled the word “Quotation” as “Quatation,” and the word “compete” as “complet.” Bidders Radha Enterprises and MER also misspelled the word “each” as “each.” Sreyas Electricals and M.M. Electrical Enterprises each misspelled the word “fitting” as “feting.”<sup>150</sup>

*Separate Bidders with the Same Phone Number and Address Bid under the Same Contract.* Many instances in Bangalore Rural showed bidders sharing the same phone number or address.<sup>151</sup> Examples include at least seven instances in which companies were linked to each other by the same phone number and submitted quotations under the same contracts, with a total value of INR 303,504 (USD 6,744).

*Unit Rates of Bidders Were Related to a Common Formula.* The DIR observed instances in which the prices quoted by bidders appeared to be related to a common formula. The DIR identified this indicator in 11 contracts, valued at INR 585,171 (USD 13,004). An example of this indicator includes printing contract WBCN 10396,<sup>152</sup> where quotations on lab forms from the losing bidders, Sreeman Printer, Sristi Color Process, and V.S.V. Enterprises, relate to a common formula of ±INR 0.02 per item, as follows: Vinay, INR 0.48; Sreeman, INR 0.49; Sristi, INR 0.51; and V.S.V., INR 0.53.

## 2. Indicators of Fraudulent and Corrupt Practices

*Missing Procurement Documents.* In Bangalore Rural, the DIR observed six instances out of 42 contracts reviewed where key documents were missing from the file, thus prohibiting a full review of the contract documents. Specific instances include a missing RFQ for the purchase of a Hewlett Packard computer (WBCN 12978). Specifications of the requested computer could not be verified against the quotations. This is also significant considering that the DIR observed that the quotation submitted by the winning bidder is very detailed, indicating all technical

<sup>148</sup> WBCN 10231.

<sup>149</sup> WBCN 12978.

<sup>150</sup> WBCN 11213.

<sup>151</sup> This collusion indicator was found in WBCNs 14101, 13484, 10396, 12226, 11367, 10926, and 14059.

<sup>152</sup> The DIR identified three indicators in WBCN 10393: (1) strong similarities between competing bids' language/presentation; (2) the unit rate of bidders is related to a common formula; and (3) separate bidders' identical phone number in same contract.

specifications of the hardware quoted, compared with the quotations of the losing bidders.

*Failure to Solicit Quotations.* The DIR observed that WBCNs 10065, 14456, 12273, and 13988 may have been procured using the direct contracting method. Direct contracting is not allowed for goods and works under the provisions of this project. In the case of WBCNs 10065 and 13988, the contractor, Nirmithi Kendra, appears to be government owned and submitted four quotations for works to be conducted in four health centers. No other quotation was sought for these contracts and Nirmithi Kendra appears to have been the only bidder.

*Winning Bid Received/Opened after Losing Bids.* The DIR found that bidders submitted two sets of quotations for a treatment/identification card contract.<sup>153</sup> Ultraprint Offset Printers' quotation was apparently opened on May 29, 2001, AB Enterprises' on May 30, 2001, and Chromographics Offset's on June 1, 2001. The quotation of the winning bidder was the last to be opened, indicating possible favorable treatment toward this bidder. The contract was awarded to Chromographics on June 1, 2001.

*Narrow Specifications Favoring a Specific Product or Manufacturer.* The DIR found that one RFQ identified brand and make of an item to be procured, in addition to the technical specifications describing the qualities of the item.<sup>154</sup> More specifically, the RFQ required quotations for "PHIL METEOR Plus Compact Overhead Projector. . ." The winning company, US Enterprises Pvt. Ltd., was the only bidder using this same description (including use of upper case), while the other two bidders, Audivision India Pvt. Ltd. and Polestar Enterprise, quoted for "Meteo Plus" overhead projector, without specifying the brand. In addition, the winning bidder's quotation specifies the technical specifications, while the losing bidders' quotations mention only the model of the item quoted and the cost.

#### **D. Bangalore, Karnataka—Karnataka State Tuberculosis Control Society**

The DIR met with project staff from the Karnataka State Tuberculosis Control Society in Bangalore (Bangalore KSTCS). The DIR selected six contracts for review, for a total value of INR 589,150 (USD 13,092) based on items procured and

<sup>153</sup> WBCN 12664 was found to have four indicators: (1) the unit rate of bidders is related to a common formula; (2) favorable treatment of specific/winning bidder; (3) strong similarities between competing bids' language/presentation; and (4) endemic recordkeeping failures.

<sup>154</sup> WBCN 11367.

contract amount. As illustrated in Table 22, the DIR identified indicators of fraud or corruption in connection with five out of six contracts.

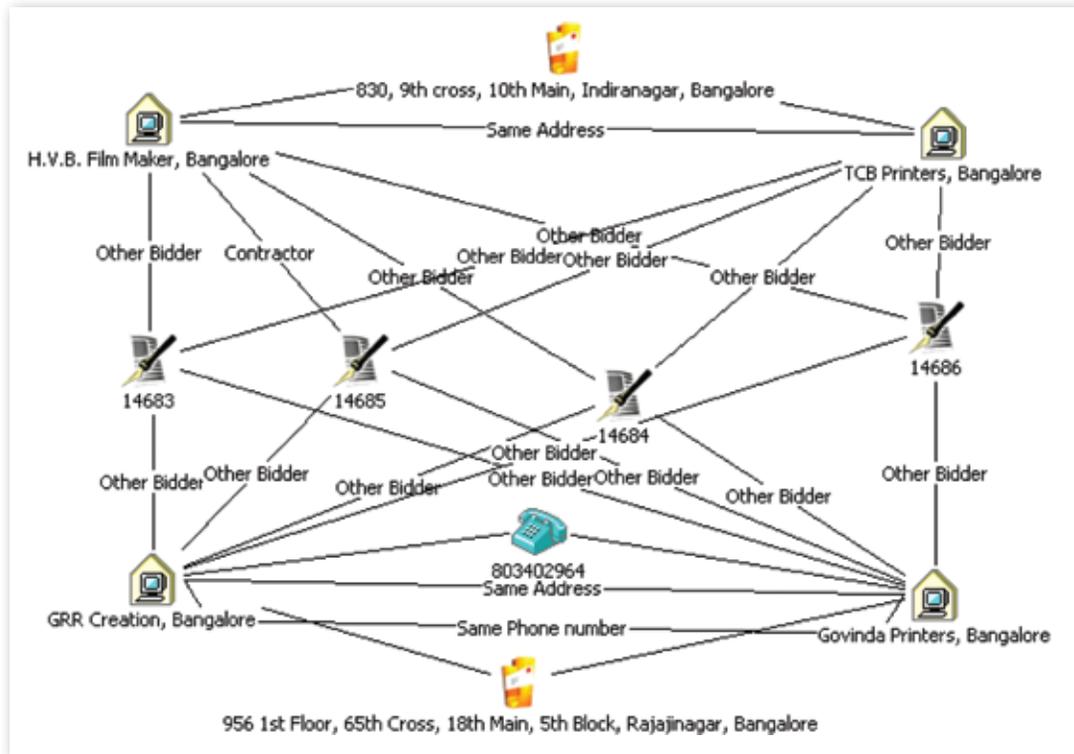
**Table 22. Observed Indicators for Bangalore KSTCS**

WBCN	Date	Contract Amount (INR)	Contractor	Indicator
14683	February 16, 2005	97,800	Sai Printers	Separate bidders, identical phone number in same contract
				Separate bidders, same address
14684	February 16, 2005	96,000	Green Line	Separate bidders, identical phone number in same contract
				Separate bidders, same address
14685	February 16, 2005	98,000	H.V.B. Film Maker	Separate bidders, identical phone number in same contract
				Separate bidders, same address
14686	February 16, 2005	98,900	Sai Printers	Separate bidders, identical phone number in same contract
				Separate bidders, same address
14682	August 19, 2005	99,600	Maithri Screens	Strong similarities between competing bids' language and/or presentation
Total		490,300		

Like other sites, KSTCS contracts showed similarities among quotations. For instance, quotations for printing contract WBCN 14682 were submitted by companies Maithri Screens, Sai Printers, and Sarika Printers and Publication. The contract was awarded to Maithri. All quotations submitted by the bidders were handwritten and all bidders mention on the envelope that they are submitting quotation for "A, B, C and D" form printing, while the RFQ mentioned A, B, C, D, and E forms. The quotation forms submitted by the bidders all have a date on the bottom, August 17, 2005. On three out of four quotations, the date is written in the same format "17/8/05" followed by "Bangalore."

In addition, the DIR found two sets of two companies submitting quotes for all four contracts, sharing the same address. As depicted in Figure 4, GRR Creation and Govinda Printers have the same phone number and the same address while H.V.B. Film Makers and TCB Printers have the same address.

**Figure 4. Common Telephone Numbers and Addresses among Bidders**



## Project Reports and Assessments

To assess the effectiveness of the Bank's supervision of the TCP's implementation, the DIR reviewed supervision documents and reports provided to and produced by the Bank. These documents and reports were reviewed for the purposes of assessing (1) whether those documents reflect an awareness of the indicators identified by the DIR; and (2) how the Bank responded to any identified indicators. The DIR also reviewed how the Bank addressed complaints filed regarding the TCP, because such complaints often provide strong indicators of problems with certain aspects of a project.

### A. Supervision Documents

The TCP audit reports provided the Bank with information about a number of problems with the TCP's procurements and implementation, although they did not indicate that the problems were pervasive. Despite the identification of these problems, the Bank's supervision documents—such as ISRs and PSRs—did not address these issues or modify the project's performance ratings because of them.

The audit reports therefore suggest a deficiency in the Bank's response to the indicators of fraud and corruption of which it becomes aware.

### 1. *Audits of Project Finances*

The TCP credit agreement required annual audits of the project's finances but did not specify how the audits were to be conducted or the level of government (national, state, or district) that was responsible for conducting the audits.<sup>155</sup> The DIR identified the following types of reports relating to the TCP:

- *CTD (National) Reports.* Yearly audit certificates and inspection reports prepared by the Office of the Director General of Audit, which opine whether “the expenditure statement/financial statements read with the observations [contained therein] represent a true and fair view of the implementation (and operation) of the Project for the year”<sup>156</sup>
- *State Tuberculosis Control Societies.* Yearly audit reports, related opinions, and utilization certificates, conducted by external auditors, which review state and district consolidated financial statements and opine, in part, on the propriety of TCP expenditures.<sup>157</sup>

The DIR received a total of 116 reports relating to the years 2002 through 2005. Those included 113 state audit reports and three audit certificates/inspection reports prepared by the Office of the Director General of Audit.

The TCP audit reports noted the following indicators of fraud that corroborate and expand upon the DIR's findings:

*Internal Control Weaknesses.* A solid internal control framework is necessary to ensure the propriety of financial transactions and the reliability of financial statements. As described in greater detail below, the TCP audit reports reviewed by the DIR include a number of references to internal control breakdowns and recommendations as to how to improve internal controls.<sup>158</sup>

<sup>155</sup> TCP Credit Agreement, art. 4, sec. 4.01.

<sup>156</sup> 2005–2006 Audit Certificate for the Revised National TCP Control Programme (undated), p. 3.

<sup>157</sup> See, e.g., Audit Report related to West Bengal STCS (Nov. 25, 2005), p. 1; Utilization Certificate related to West Bengal STCS (Nov. 25, 2005), p. 9.

<sup>158</sup> See, e.g., 2003–2004 Rajasthan Audit Report, Management Letter, p. 1 (Dec. 12, 2004); 2005–2006 Jammu Audit Report, Management Letter (Jan. 3, 2006), p. 1; 2005–2006 Tripura Audit Report, Management Letter (Feb. 27, 2006), p. 1. In addition, the Bank's project team identified the overall weakness of internal controls in correspondence to the Deputy Director General (TCP) in 2005, 2006, and 2007, highlighting specific issues requiring immediate attention. For example, in a 2006 letter, the Bank's Senior Public Health Specialist wrote: “Internal control issues continue to be weak in a number of cases which is evidenced by no physical verifications of assets, bank reconciliation statements not being prepared regularly and delay in obtaining utilization certificates for civil works, etc.” Letter from Birte Holm Sorensen, World Bank, to Dr. L. S. Chauhan, Deputy Director General (TCP), re: TCP Control Project (Credit 2936-IN) Audit Reports 2004–2005 (Jan. 2, 2006), p. 2.

- *Lack of Reconciliations and Inadequate Tracking of Outstanding Advances.* The audit reports document at least 12 instances of delinquent outstanding advances<sup>159</sup> and at least eight instances of incomplete or delinquent reconciliations, including reconciliations of claimed cash balances to bank statements.<sup>160</sup>
- *Inadequate Controls Surrounding SOEs.* The reports contain at least five references to inconsistencies between expenses recorded on SOEs and expenses recorded in financial accounts.<sup>161</sup> The reports also noted delays in the completion of SOE claim submissions.<sup>162</sup>
- *Inability to Maintain Accurate Financial Accounts.* The audit reports contain at least 12 references to issues relating to poor maintenance of financial accounts, including the failure to maintain consistent account headers, to record transactions in the correct periods, or to run trial balances at recommended intervals.
- *Inadequate Procedures Surrounding Handling of Cash.* The audit reports identify at least nine instances of deficient procedures surrounding the handling and recording of cash. These included allowing cash payments above approved limits, failing to record cash transactions properly, and failing to maintain consistency between opening and closing account balances.<sup>163</sup>

<sup>159</sup> See 2002–2003 Kerala Audit Report (Jul. 10, 2003), p. 3; 2003–2004 Rajasthan Audit Report, Management Letter (Dec. 12, 2004), p. 2; 2003–2004 Uttar Pradesh Audit Report, Management Letter (Jan. 13, 2005), p. 1; 2003–2004 Himachal Pradesh Audit Report (Nov. 25, 2004), p. 2; 2004–2005 Himachal Pradesh Audit Report (Nov. 9, 2005), p. 1; 2003–2004 Himachal Pradesh Audit Report (Nov. 25, 2004), p. 2; 2003–2004 Himachal Pradesh Audit Report, Management Letter (illegible date), p. 1; 2003–2004 Kerala Audit Report, Management Letter (Jul. 31, 2004), p. 1; 2003–2004 Kerala Audit Report, Management Letter (Jul. 31, 2004), p. 1; 2003–2004 Tamil Nadu Audit Report, Management Letter (Sep. 10, 2004), p. 1; 2003–2004 Madhya Pradesh Audit Report (Oct. 3, 2004), p. 2; 2004–2005 Himachal Pradesh Audit Report (Nov. 9, 2005), p. 1.

<sup>160</sup> See 2003–2004 Rajasthan Audit Report, Management Letter (Dec. 12, 2004), p. 2; 2003–2004 Madhya Pradesh Audit Report (Oct. 3, 2004), p. 2; 2004–2005 Gujarat Audit Report, Management Letter (Oct. 8, 2005), p. 2; 2004–2005 Jammu Audit Report (Aug. 16, 2005), p. 2; 2004–2005 Meghalaya Audit Report, Management Letter (Jun. 30, 2005), p. 1; 2005–2006 Meghalaya Audit Report, Management Letter (Jan. 10, 2006), p. 1; 2004–2005 Kerala Audit Report, Management Letter (Jul. 21, 2005), p. 1; 2005–2006 Tripura Audit Report, Management Letter (Feb. 27, 2006), p. 1.

<sup>161</sup> See 2003–2004 Meghalaya Audit Report, Management Letter (Aug. 27, 2004), p. 1; 2003–2004 Madhya Pradesh Audit Report (Oct. 3, 2004), p. 2; 2004–2005 West Bengal Audit Report, Management Letter (Jul. 26, 2005), p. 1; 2005–2006 Jammu Audit Report (Nov. 30, 2005), p. 2; 2005–2006 Jammu Audit Report (Nov. 30, 2005), p. 2.

<sup>162</sup> See 2004–2005 Meghalaya Audit Report, Management Letter (Jun. 30, 2005), p. 1; 2005–2006 Meghalaya Audit Report, Management Letter (Jan. 10, 2006), p. 1; 2005–2006 Tripura Audit Report, Management Letter (Feb. 27, 2006), p. 1.

<sup>163</sup> See 2005–2006 Uttar Pradesh Audit Report (Feb. 16, 2006), p. (illegible); 2005–2006 Karnataka Audit Report (illegible date), p. 2; 2002–2003 Kerala Audit Report (Jul. 10, 2003), p. 3; 2004–2005 Jammu Audit Report, Management Letter (illegible date), p. 1; 2004–2005 Jammu Audit Report (Aug. 16, 2005), p. 2; 2004–2005 Gujarat Audit Report, Management Letter (Oct. 8, 2005), p. 2; 2004–2005 Gujarat Audit Report, Management Letter (Oct. 8, 2005), p. 2; 2002–2003 Chhattisgarh Audit Report (Sep. 27, 2003), p. 2; 2003–2004 Rajasthan Audit Report (Nov. 22, 2004), p. 3; 2005–2006 Rajasthan Audit Report, Correspondence Regarding Notes to accounts (illegible date), p. 1.

- *Verification of Fixed Assets Not Performed.* At least 16 audit reports indicate a failure to maintain fixed asset registers and/or to perform periodic physical counts.<sup>164</sup>

*Indicators of Possible Fraud and Corruption.* In addition to the internal control issues identified throughout the audit reports, the reports include a number of indicators of fraud and corruption, including:

- *Unsupported or Questionable Cash Transactions.* Several audit reports described fraudulent cash withdrawals and suggested the adoption of specific internal control measures for banking activities.<sup>165</sup> Another reported bank withdrawals that were not recorded on the project's books.<sup>166</sup>
- *Unsupported or Questionable Expenditures.* The 2003–2004 audit report for Himachal Pradesh referred to an “adjustment” relating to an INR 91,000 (USD 2,022) “advance” that was made to “the Resident Commissioner, Killar (Pangi),” for which “[n]o bills and vouchers” existed and for which “[e]ven the dates of the payments and the names of the persons to whom payments have been made have not been given.”<sup>167</sup> The 2005–2006 audit report for Delhi indicated that certain expense items were re-categorized as “advances” due to the lack of proper support for the use of funds.<sup>168</sup> Other reports noted instances where expenditures lacked proper support<sup>169</sup> or were mischaracterized.<sup>170</sup>
- *Improper Use of Fixed Assets and/or Consumables.* Several audit reports described the misuse of project vehicles, including one observation that

<sup>164</sup> See 2002–2003 Kerala Audit Report (Jul. 10, 2003), pp. 2–3; 2003–2004 Uttar Pradesh Audit Report, Management Letter (Jan. 13, 2005), p. 1; 2003–2004 Himachal Pradesh Audit Report, Management Letter (illegible date), p. 1; 2003–2004 Bihar Audit Report (Dec. 21, 2004), p. 2; 2003–2004 Arunachal Pradesh Audit Report, Management Letter (Jun. 28, 2004), p. 1; 2003–2004 Kerala Audit Report, Management Letter (Jul. 31, 2004), p. 1; 2003–2004 West Bengal Audit Report (Sep. 17, 2004), p. 7; 2004–2005 West Bengal Audit Report, Management Letter (Jul. 26, 2005), p. 1; 2004–2005 Jammu Audit Report, Management Letter (illegible date), p. 1; 2004–2005 Kashmir Audit Report (Sep. 7, 2005), p. 1; 2004–2005 Kerala Audit Report, Management Letter (Jul. 21, 2005), p. 1; 2004–2005 Arunachal Pradesh Audit Report (Jun. 21, 2005), p. 12; 2005–2006 Gujarat Audit Report, Management Letter (Dec. 14, 2005), p. 1; 2005–2006 Uttar Pradesh Audit Report, Management Letter (Feb. 16, 2006), p. 1; 2005–2006 Jammu Audit Report, Management Letter (Jan. 3, 2006), p. 1; 2005–2006 Tripura Audit Report, Management Letter (Feb. 27, 2006), p. 1.

<sup>165</sup> See 2003–2004 Assam Audit Report, Management Letter (Aug. 8, 2004), p. 1; 2004–2005 Kerala Audit Report, Management Letter (Jul. 21, 2005), p. 1.

<sup>166</sup> See 2004–2005 Gujarat Audit Report, Management Letter (Oct. 8, 2005), p. 2.

<sup>167</sup> See 2003–2004 Himachal Pradesh Audit Report (Nov. 25, 2004), p. 1.

<sup>168</sup> See 2005–2006 Delhi Audit Report (Mar. 1, 2006), p. 2.

<sup>169</sup> See 2003–2004 Kerala Audit Report, Management Letter (Jul. 31, 2004), p. 2; 2003–2004 Jammu Audit Report (illegible date), p. 3; 2004–2005 Jammu Audit Report (Aug. 16, 2005), p. 4.

<sup>170</sup> See 2003–2004 West Bengal Audit Report (Sep. 17, 2004), p. 7.

a vehicle was being used by a government official.<sup>171</sup> The 2003–2004 audit report for Bihar noted that certain TCP consumables were stored at an official’s residence.<sup>172</sup> The 2003–2004 audit report for Rajasthan noted that one district had not disclosed any fixed assets on its balance sheet at all, and suggested that management take steps to rectify the situation.<sup>173</sup>

- *Procurement Irregularities (Lack of Competitive Bidding)*. Two audit reports noted instances in which items were procured “without inviting quotations.”<sup>174</sup>

*Bank Response to Audit Reports.* In general, because of the limited amount of correspondence and documentation reviewed by the DIR, the DIR was not able to determine the extent to which the Bank followed up, on a systematic basis, on specific audit report findings.<sup>175</sup> The DIR did note some requests for clarification and status reports regarding issues raised in specific audit reports, such as in the case of a USD 22,222 fraudulent withdrawal in the Kerala State TCP Society.<sup>176</sup> However, with respect to many of the issues raised in the audit reports, the DIR is not aware of any documentation suggesting that the Bank took note of the issues or took any action to address them.

## 2. *Procurement Post-Reviews*

The Bank conducts procurement post-reviews to (1) verify the procurement and contracting procedures; (2) verify technical compliance and physical completion; (3) review contract management issues; (4) determine whether adequate procurement, planning, implementation, and monitoring systems are in place; and (5) identify remedies to correct any noted deficiencies.<sup>177</sup>

<sup>171</sup> See 2003–2004 Himachal Pradesh Audit Report (Nov. 25, 2004), p. 1; see also 2004–2005 Himachal Pradesh Audit Report (Nov. 9, 2005), p. 1; Action Taken on the Observations of the Audit of STCS 2004–05 Himachal Pradesh, Shimla–171009 (illegible date), p. 1; 2003–2004 Jammu Audit Report (illegible date), p. 3; 2004–2005 Jammu Audit Report, Management Letter (illegible date), p. 1.

<sup>172</sup> See 2003–2004 Bihar Audit Report (Dec. 21, 2004), p. 2.

<sup>173</sup> See 2003–2004 Rajasthan Audit Report, Management Letter (Dec. 12, 2004), p. 2.

<sup>174</sup> See 2003–2004 Meghalaya Audit Report, Management Letter (Aug. 27, 2004), p. 1; 2005–2006 Delhi Audit Report (Mar. 1, 2006), p. 3.

<sup>175</sup> See letter from Suneeta Singh, World Bank, to Dr. V. S. Salhotra, Chief Medical Officer (TCP) (Dec. 18, 2002); letter from Michael F. Carter, World Bank, to Dr. Ranjit Bannerji, Joint Secretary (Nov. 3, 2003); letter from Suneeta Singh, World Bank, to Dr. L. S. Chauhan, Deputy Director General (TCP) (Jan. 13, 2004); letters from Birte Holm Sorensen, World Bank, to Dr. L. S. Chauhan, Deputy Director General (TCP) (Jun. 22, 2005, Jan. 3, 2006, and Jan. 18, 2007); letter from Dr. L.S. Chauhan, Deputy Director General (TCP), to Birte Holm Sorensen, World Bank (Feb. 28, 2007).

<sup>176</sup> Letters from Birte Holm Sorensen, World Bank, to Dr. L. S. Chauhan, Deputy Director General (TCP) (Jan. 3, 2006, and Jan. 18, 2007); see also letter from Dr. L.S. Chauhan, Deputy Director General (TCP), to Birte Holm Sorensen, World Bank (Feb. 28, 2007). In the case of the fraudulent withdrawal, the Kerala TCP Society identified the issue prior to the audit and took action to recover the funds.

<sup>177</sup> A. Arauo (OCPCPR) memorandum re: “Procurement Post Reviews and Independent Procurement Reviews: Processes and Procedures” (Jul. 19, 2001), p. 3.

The DIR reviewed all of the TCP post-review reports that had been uploaded to the Bank's document management system (IRIS). Those reports related to the Bank's procurement team's visits to the following states: Arunachal Pradesh, Assam, Chhattisgarh, Delhi, Goa, Gujarat, Jammu and Kashmir, Kerala, Madhya Pradesh, Maharashtra, Manipur, Meghalaya, Mizoram, Nagaland, Punjab, Sikkim, Tamil Nadu, Tripura, Uttar Pradesh, and West Bengal.<sup>178</sup> The Bank's post-reviews identified a number of indicators.

*Indicators of Possible Fraud and Corruption.* Because procurement post-reviews are focused on determining adherence to the Bank's procurement guidelines, issues and findings highlighted in those reports may sometimes provide notice of potential indicators of fraud and corruption. The TCP post-reviews examined by the DIR include the following indicators of possible fraud and corruption:

- *Improper Procurement Method Used.* The reports identified at least 37 instances across 11 states, relating to contracts with a total value of USD 184,444, in which the incorrect procurement method was used. Of these, 33 contracts were sole sourced; three were awarded on the basis of repeat orders and were, therefore, effectively sole sourced; two were awarded on the basis of state guidelines instead of competitive bidding; and one was awarded to a company that did not even bid, effectively resulting in a sole source.<sup>179</sup>
- *Improper Bid Notification Procedures.* The reports identify four instances across three states, relating to contracts with a total value of USD 2,788, in which no solicitation letters were issued and bids were provided over the telephone.<sup>180</sup>
- *Vague Solicitation Letters.* The reports indicate that in nine cases across six states, relating to contracts with a total value of USD 19,609, solicitation letters were too vague and failed to include required information such as quantities, bid validity period, and delivery details.<sup>181</sup> Vague solicitation

<sup>178</sup> Two separate procurement post-reviews were performed in Tamil Nadu.

<sup>179</sup> Procurement Post Review Report—TCP, Assam (May 30, 2006), pp. 18–19; Procurement Post Review Report—TCP, Chhattisgarh (Apr. 3, 2006), p. 13; Procurement Post Review Report—TCP, Delhi (May 2, 2006), p. 13; Procurement Post Review Report—TCP, Goa (Jun. 2, 2006), p. 6; Procurement Post Review Report—TCP, Jammu & Kashmir (May 15, 2006), pp. 6–8; Procurement Post Review Report—TCP, Kerala (May 25, 2006), pp. 13–14, 19–20; Procurement Post Review Report—TCP, Madhya Pradesh (Mar. 21, 2006), pp. 14–25; Procurement Post Review Report—TCP, Nagaland (Apr. 27, 2006), pp. 5–6, 9, 11; Procurement Post Review Report—TCP, Sikkim (Apr. 13, 2006), p. 9; Post Review Report—TCP, Uttar Pradesh (Apr. 4, 2006), pp. 28–29; Post Review Report—TCP, West Bengal (Apr. 4, 2006), p. 19.

<sup>180</sup> Procurement Post Review Report—TCP, Delhi (May 2, 2006), p. 6; Procurement Post Review Report—TCP, Goa (Jun. 2, 2006), p. 9; Procurement Post Review Report—TCP, Manipur (Apr. 13, 2006), pp. 12–13.

<sup>181</sup> Procurement Post Review Report—TCP, Assam (May 30, 2006), pp. 8, 18; Procurement Post Review

letters can result in incomplete responses from some vendors while allowing others to obtain the clarification necessary to submit a more responsive bid.

- *Orders Placed Prior to Vendor Selection.* The reports indicate that in three separate instances in three different states, relating to contracts with a total value of USD 7,680, vendor selection or the actual receipt of goods occurred prior to the bid review and official vendor selection.<sup>182</sup> The award of contracts prior to receiving offers may indicate that the winning vendors were pre-selected.
- *Bids Submitted Prior to Issuance of Solicitation Letter.* The Goa review noted a contract for USD 295 for which two bids were dated prior to the issuance of the solicitation letters, which may indicate that the bidders were contacted in advance and possibly provided advance information on bidding requirements.<sup>183</sup>
- *Pricing Irregularities.* In two separate cases, reviewers identified pricing irregularities within contracts. In Goa, USD 200 of bamboo sticks were sole sourced at twice the price paid for the same item a year earlier.<sup>184</sup> In Chhattisgarh, several items were procured at prices higher than those offered by other qualified bidders.<sup>185</sup>
- *Insufficient Time to Bid.* The reports identify four instances across three states, relating to contracts worth a total of USD 8,355, in which the tender processes did not allow sufficient time for suppliers to submit bids.<sup>186</sup> Failing to allow for sufficient response times may result in interested and competitive suppliers being unable to bid properly, and can lead to the steering of contracts to preferred suppliers.

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Report—TCP, Delhi (May 2, 2006), pp. 7, 8; Procurement Post Review Report—TCP, Gujarat (unknown date), p. 4; Procurement Post Review Report—TCP, Jammu and Kashmir (May 15, 2006); pp. 5, 8–9; Procurement Post Review Report—TCP, Manipur (Apr. 13, 2006), p. 5; Procurement Post Review Report—TCP, Mizoram (date unknown), p. 5.

<sup>182</sup> Procurement Post Review Report—TCP, Assam (May 30, 2006), p. 17; Procurement Post Review Report—TCP, Goa (Jun. 2, 2006), p. 9; Procurement Post Review Report—TCP, Uttar Pradesh (Apr. 4, 2006), p. 30.

<sup>183</sup> Procurement Post Review Report—TCP, Goa (Jun. 2, 2006), p. 5.

<sup>184</sup> *Ibid.*, p. 10.

<sup>185</sup> Procurement Post Review Report—TCP, Chhattisgarh (Apr. 3, 2006), p. 8.

<sup>186</sup> Procurement Post Review Report—TCP, Arunachal Pradesh (May 6, 2006), p. 18; Procurement Post Review Report—TCP, Jammu and Kashmir (May 15, 2006), p. 6; Procurement Post Review Report—TCP, Manipur (Apr. 13, 2006), pp. 5–6.

- *Contract Splitting.* The Uttar Pradesh post-review report indicates that at least one tender, totaling INR 29,350 (USD 652), was split into two contracts to keep the value below the INR 15,000 review threshold.<sup>187</sup>
- *Unapproved Bid and Tender Modifications.* The reports identify three instances in which bids were modified after they were submitted. In Goa, two bidders submitted modified bids two days after quotations were opened for a USD 295 contract.<sup>188</sup> The Tripura report identified three separate instances in which the same contractor submitted an alternate bid, in the same amount, for three different remodeling contracts, each of which was worth USD 778.<sup>189</sup> It is not clear whether the new bid amount was higher or lower than the original bid.
- *Bid Similarities.* One tender file from Sikkim included three bids related to a USD 864 contract. The reviewer noted that all three quotations “were exactly identical in all respects except rates raising doubts about their genuineness.”<sup>190</sup>
- *Missing Documentation.* In 11 instances across three states, relating to contracts worth a total of USD 9,550, no bid documents whatsoever were available for review.<sup>191</sup> The lack of tender documents brings into question whether or not a competitive process was undertaken at all in those cases.

### 3. SOE Financial Reviews

The SAR Financial Management representatives provided the DIR with five Statement of Expenditure Financial Review reports related to TCP, for the states of Assam, Maharashtra, Karnataka, Tamil Nadu, and Gujarat. These reviews were performed to verify that claimed expenditures (1) were used for their intended purpose, (2) were properly supported by adequate documentation, (3) were properly recorded in the accounting records, and (4) were eligible for financing by the bank. Further, the reviews were performed to assess whether the projects had adequate internal control frameworks to support the accurate preparation of SOEs.<sup>192</sup>

<sup>187</sup> Post Review Report—TCP, Uttar Pradesh (Apr. 4, 2006), pp. 34–35.

<sup>188</sup> Procurement Post Review Report—TCP, Goa (Jun. 2, 2006), p. 5.

<sup>189</sup> Procurement Post Review Report—TCP, Tripura (Apr. 4, 2006), pp. 8–10.

<sup>190</sup> Procurement Post Review Report—TCP, Sikkim (Apr. 13, 2006), p. 7.

<sup>191</sup> Procurement Post Review Report—TCP, Meghalaya (Apr. 10, 2006), pp. 7–9; Post Review Report—TCP, Uttar Pradesh (Apr. 4, 2006), pp. 16–21; Post Review Report—TCP, West Bengal (Apr. 4, 2006), pp. 11, 14.

<sup>192</sup> Statement of Expenditure Financial Review, Tuberculosis Control Project, Assam (May 31, 2005); Statement of Expenditure Financial Review, Tuberculosis Control Project, Maharashtra (June 7, 2005); Statement of Expenditure Financial Review, Tuberculosis Control Project, Tamil Nadu (Apr. 30, 2005); Statement of Expenditure

The SOE Financial Reviews include several indications of internal control weaknesses such as inadequate recordkeeping and failure to properly approve SOE submitted to the Bank.<sup>193</sup> In addition, the reports include several indicators of fraud and corruption including:

*Advances Claimed As Expenditure.* The report for Tamil Nadu indicates that advances given for certain hospital repairs in the amount of INR 56,000 were included in SOE expenditure figures.<sup>194</sup>

*Inadequate Handling of Cash and Fraudulent Withdrawal.* The report for Assam indicates that temporary employees were being allowed to handle banking transactions, creating an opportunity for fraud. Further, at DTCS Nalbari, an embezzlement of INR 112,200 was committed through a forgery. The report notes, however, that the amount was subsequently recovered.<sup>195</sup>

*Discrepancies between SOE Amounts and Audited Financial Statements.* Each of the five reports included a finding that expenditure totals in the SOEs did not agree to audited financial statements or the underlying books and records. The total discrepancy aggregated INR 2,818,000.<sup>196</sup>

#### 4. The ICR

*Project Rating.* The ICR rated the TCP's implementation and achievement of development objectives as "satisfactory." The ICR concluded that the project achieved its development objective "to reduce mortality, morbidity and disability due to TB by curing TB cases, thereby reducing the incidence of infectious TB, the annual risk of infection, and the development of drug resistance."<sup>197</sup> The ICR cited the following statistics in support of its conclusion:

- "Initially it had been envisaged that, over the entire project period, public sector health services in the project districts would process 1.9 million

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Financial Review, Tuberculosis Control Project, Karnataka (Jan. 11, 2006); Statement of Expenditure Financial Review, Tuberculosis Control Project, Gujarat (May 31, 2005).

<sup>193</sup> Statement of Expenditure Financial Review, Tuberculosis Control Project, Assam (May 31, 2005), p. 7, Appendix B; Statement of Expenditure Financial Review, Tuberculosis Control Project, Tamil Nadu (Apr. 30, 2005), p. 8.

<sup>194</sup> Statement of Expenditure Financial Review, Tuberculosis Control Project, Tamil Nadu (Apr. 30, 2005), p. 7.

<sup>195</sup> Statement of Expenditure Financial Review, Tuberculosis Control Project, Assam (May 31, 2005), p. 7.

<sup>196</sup> Statement of Expenditure Financial Review, Tuberculosis Control Project, Assam (May 31, 2005), p. 6; Statement of Expenditure Financial Review, Tuberculosis Control Project, Maharashtra (June 7, 2005), p. 6; Statement of Expenditure Financial Review, Tuberculosis Control Project, Tamil Nadu (Apr. 30, 2005), p. 9; Statement of Expenditure Financial Review, Tuberculosis Control Project, Karnataka (Jan. 11, 2006), p. 6; Statement of Expenditure Financial Review, Tuberculosis Control Project, Gujarat (May 31, 2005), p. 6.

<sup>197</sup> ICR, p. 7.

cases where TB was suspected, a target that was later raised to 2.4 million. The actual estimated number was slightly over four million. . . .”<sup>198</sup>

- “Similarly, it had been envisaged that, over the entire project period, about 800,000 patients would be put on DOTS treatment in the project districts, but the actual number was more than double this target, at almost 1.8 million patients.”<sup>199</sup>
- “Also in 2004, a sputum positive case detection rate of 72 percent was achieved in the project districts against a target of 50 percent in the SAR [South Asia Region].”<sup>200</sup>
- “The *cure rate* for cases treated in project districts in 2004 reached 86 percent, slightly higher than the project’s target of 85 percent. The public sector TB cure rate nationwide before the start of the project was only about 35 percent, which shows how large a difference the introduction of DOTS has brought.”<sup>201</sup>

The ICR also concluded that the project had “developed clear operational and technical guidelines for treatment as well as procurement, financial management and other technical aspects of the project.”<sup>202</sup>

“The Bank’s performance in the identification, preparation, and appraisal of the project [was] rated *satisfactory*,”<sup>203</sup> as was the Bank’s performance during supervision.<sup>204</sup> The ICR concluded that “*Aide-Mémoires* were effective in alerting the MOFHW and CTD to problems with project execution,” and that “Project Status Reports (PSRs) realistically rated the performance of the project both in terms of achievement of development objectives and project implementation.”<sup>205</sup> The ICR also determined that “[t]he Bank was . . . firm when the circumstances so required, as demonstrated during suspension and restructuring of the project.”<sup>206</sup> “By not canceling the project at that time,” the ICR noted, “the Bank management took a calculated risk and in retrospect this turned out to be a good decision.”<sup>207</sup>

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<sup>198</sup> *Ibid.*, p. 8.

<sup>199</sup> *Ibid.*

<sup>200</sup> *Ibid.*

<sup>201</sup> *Ibid.*

<sup>202</sup> *Ibid.*, p. 13.

<sup>203</sup> *Ibid.*, p. 16.

<sup>204</sup> *Ibid.*, p. 17.

<sup>205</sup> *Ibid.*

<sup>206</sup> *Ibid.*

<sup>207</sup> *Ibid.*

The Borrower's overall performance was rated “*moderately satisfactory*.”<sup>208</sup> The ICR concluded that, “[w]hile the government's performance before suspension was clearly unsatisfactory, improvement after the lifting of suspension was remarkable.”<sup>209</sup>

*Identification of Implementation Problems.* The ICR identified “[t]wo aspects of project design which became serious constraints to effective program implementation . . . (i) the centralization of decision making in the program and unclear role assigned to the states; and (ii) weak procurement capacity of the MOHFW.”<sup>210</sup>

With respect to the former, the ICR noted that “[t]he reluctance of the MOHFW and WHO to provide wider responsibilities to the states, proved to be a major constraint to ensure decentralized implementation and extending the [TCP's] coverage.”<sup>211</sup> The ICR concluded that the problem was adequately “addressed during the project restructuring [in 2002].”<sup>212</sup>

With regard to inadequate procurement capacity, the ICR noted the MOHFW's failure to accede to the Bank's insistence that an independent procurement agent be appointed, which led to the project's suspension in March 1998.<sup>213</sup> Although “the GOI [Government of India] signed a contract with RITES for this purpose” in January 2000, the ICR concluded that “timely procurement of drugs remained an issue even after this step was concluded.”<sup>214</sup>

However, the ICR did not refer at all to any of the procurement problems and other issues that had been noted in the various audit reports and procurement post-reviews. Similarly, although the *aides-mémoire* sometimes referred to procurement delays<sup>215</sup> and an inadequate financial management infrastructure,<sup>216</sup> they never noted any of the fraud or corruption indicators described in the audit and post-review reports.

<sup>208</sup> *Ibid.*, p. 20.

<sup>209</sup> *Ibid.*, p. 18.

<sup>210</sup> *Ibid.*, p. 7.

<sup>211</sup> *Ibid.*, p. 14.

<sup>212</sup> *Ibid.*

<sup>213</sup> *Ibid.*, pp. 14–15.

<sup>214</sup> *Ibid.*, p. 15.

<sup>215</sup> See, e.g., *Aide-Mémoire* (Jan. 24–25, 2000), p. 4; *Aide-Mémoire* (Sept. 4–22, 2000), pp. 4–5; *Aide-Mémoire* (Sept. 27–Oct. 14, 2004), p. 4.

<sup>216</sup> See, e.g., *Aide-Mémoire* (Sept. 4–22, 2000), pp. 13–14; *Aide-Mémoire* (Sept. 27–Oct. 14, 2004), p. 5.

## B. Complaints Management

As detailed below, the DIR reviewed a number of complaints relating to the pharmaceuticals and equipment procured under the TCP. In a number of instances, the available documentation was not sufficient to determine whether the Bank responded appropriately to the complaints. However, in the cases for which documentation was available, the DIR concluded that the Bank generally took appropriate steps to investigate and resolve the complaints.

### 1. *Pharmaceuticals*

*The 1999 Tender.* With respect to the 1999 tender, the Bank received complaints from two companies (Lyka Labs and Maneesh) whose bids were deemed non-responsive. The Bank referred the complaints to the procurement agency (HSCC) for consideration.<sup>217</sup>

Both HSCC and the Bank determined that the BEC properly disqualified Lyka Labs, which failed to provide evidence of a manufacturing license for the pharmaceutical “combi-packs” that were a required element of the products for which Lyka Labs was the lowest evaluated bidder (PCs 1 and 3).

According to the BER, Maneesh’s bid was deemed non-responsive because the company failed to demonstrate the necessary volume of prior sales. The documents provided to the DIR do not reveal how HSCC dealt with Maneesh’s subsequent complaint. However, Maneesh did not submit the lowest bid for any of the three items for which it competed, so its complaint does not give rise to concerns with the BEC’s ultimate findings.

*The 2000 Tender.* The DIR reviewed three complaints relating to the 2000 tender. The first such complaint, a letter from Novartis to the Bank, argued that Novartis should have been awarded the contract at issue because it was the lowest bidder. However, Novartis acknowledged in its letter that “due to an oversight, certain documents were not submitted” with its bid. In response, the procurement agent (MECON) properly stood by its decision to exclude Novartis on the basis of the inadequate documentation.

Two other complaints, addressed to the Bank and others, questioned the decision to exclude Cadila/Zydus from competing for PC1 contracts. In response, MECON properly pointed out that the company failed to demonstrate that it had supplied a

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<sup>217</sup> As noted earlier in this chapter, procurement was initially conducted by the MOHFW, then on an interim basis by HSCC. In 2000, at the Bank’s insistence, an independent professional procurement agency, MECON, was selected to oversee procurements. When the project was extended in 2005, WHO’s Global Drug Facility assumed the responsibilities for managing procurement under the TCP.

certain quantity of the drug over the past two years, as required by the tender documents. That requirement had been reviewed and approved by the Bank, which properly supported MECON's interpretation.

*The 2001 Tender.* The DIR reviewed four complaints relating to the 2001 tender. Pure Pharma complained to the Bank about a clarification to the bidding documents issued by MECON approximately one month before the bid submission deadline. Specifically, Pure Pharma took issue with what it viewed as "unrealistic stipulations sets regarding the annual turnover requirement of [International Tender Documents] imposed at the end of the sale period" and complained that the huge bid securities requested had financial implications for the companies. The DIR was not provided with any other correspondence related to this matter. However, Pure Pharma was not disqualified from this process, so this issue apparently had no impact in its ability to participate in the tender.

The Bank was also copied on correspondence from Nestor, complaining that the company had been unfairly excluded from the bidding process because of an unjust deregistration by the MSO. The DIR did not receive additional documentation showing how those complaints were processed. However, as noted above, Nestor had been deregistered by the MSO at this time and was not authorized to provide drugs to the MOHFW.

I. D. Nagpal submitted a note to the Bank stating that one of the bidders, Lupin Laboratories, had been debarred by the Ministry of Defence in April 2001 with respect to supplying pyrazinamide 750 mg. According to Mr. Nagpal, the company sought to avoid the debarment by merging with Lupin Chemicals, forming a new entity called "Lupin Ltd." The DIR did not receive additional documentation regarding this complaint. However, the MSO registry does not record Lupin as being deregistered, so it appears that the company was properly included in the 2001 tender.

Finally, a complaint submitted by the Indian Society to Eradicate Corruption in Public Spending supported Nestor's claim that it was unfairly excluded and repeated Mr. Nagpal's complaint that Lupin Ltd. received a contract award for which another company, Lupid Laboratories, submitted the bid. No documentation was provided to the DIR to determine how this complaint was handled.

*The 2002 Tender.* The DIR located only one complaint relating to the 2002 tender. Pure Pharma wrote to the Bank, arguing that the company should have been awarded certain contracts despite the fact that it had been deregistered as an authorized supplier of isoniazid. The DIR has not been provided with documentation

showing how this complaint was handled. However, as discussed above, it is clear that Pure Pharma was deregistered at the time and thus correctly excluded from all PCs that included isoniazid.

*The 2004 Tender.* With the exception of the correspondence relating to Nestor's and Pure Pharma's deregistrations, described in detail earlier in this chapter, no complaints were submitted to the Bank with regard to the 2004 tender.

## 2. *Equipment*

The DIR located six complaints that were submitted to the Bank relating to the procurement of equipment. Three of the complaints related to the interpretation of certain bid specifications and the reasons why some companies' bids (Carl Zeiss, Labomed, and HD Consortium [HDC]) were deemed non-responsive. In the case of Zeiss and HDC, the Bank sought clarification from HSCC and, after considering HSCC's response, rejected the complaint. There is no documentation showing how the Bank handled the complaint submitted by Labomed.

The other three complaints (submitted by Leica Microsystems, Darbara Singh, and Speed Fair Co.) related to the claim that MLW Intermed (provider of light instruments equipment) was not the manufacturer of the microscopes and that the microscopes were not manufactured in Germany. The correspondence reviewed by the DIR suggests that the Bank's South Asia Region procurement team (SAR team) properly handled the matter, seeking clarifications from the Borrower and demanding that specific measures be taken to establish whether the allegations were true. Only after these additional steps had been taken did the Bank give its No-Objection to the contract award, with the proviso that if it was later established that the microscopes were not produced by MLW in Germany, the Bank would not finance the contract. In addition, the SAR team contacted the Bank's Oversight Committee for Fraud and Corruption (OCFC, within which INT was located at that time) setting out the allegations. A member of the SAR team later visited the MLW premises in Germany to establish whether the company was producing microscopes, and the findings were shared with the OCFC. Additionally, on its website, MLW Germany claims to have provided microscopes to India in 1998–2000 under the RNTCP and Malaria projects.

The DIR was advised by Dr. H. R. Raweendra, a WHO consultant, that he had heard from an unidentified lab technician that the microscopes were manufactured in China. However, he was unable to provide the source of that information and identify the contracts related to this rumor. In short, the DIR found no indicators calling into question the origin of the microscopes.

# Description of Product Codes

Product Code (PC) #	PC Short Description	PC Description	
1	Treatment box for Category I patient	24 combi-packs each with: -1 rifampicin cap. 450 mg -2 isoniazid tab. 300 mg -3 ethambutol tab. 400 mg -3 pyrazinamide tab. 500 mg	18 multi-blisters each with: -3 rifampicin cap. 450 mg -6 isoniazid tab. 300 mg -4 pyridoxine tab. 5 mg
2	Treatment box for Category II patient	36 combi-packs each with: -1 rifampicin cap. 450 mg -2 isoniazid tab. 300 mg -3 ethambutol tab. 400 mg -3 pyrazinamide tab. 500 mg	22 multi-blisters each with: -3 rifampicin cap. 450 mg -6 isoniazid tab. 300 mg -9 ethambutol tab. 400 mg -4 pyridoxine tab. 5 mg
3	Treatment box for Category III patient	24 combi-packs each with: -1 rifampicin cap. 450 mg -2 isoniazid tab. 300 mg -3 pyrazinamide tab. 500 mg	18 multi-blisters each with: -3 rifampicin cap. 450 mg -6 isoniazid tab. 300 mg -4 pyridoxine tab. 5 mg
4	Prolongation pouch	12 combi-packs each with: -1 rifampicin cap. 450 mg -2 isoniazid tab. 300 mg -3 ethambutol tab. 400 mg -3 pyrazinamide tab. 500 mg	
5	Streptomycin 750 mg	Vials in loose packs, each vial of 750 mg	
6	Rifampicin 150 mg	Blister strip of 10 tablets, each capsule of 150 mg	
7	Isoniazid 100 mg	Blister strip of 10 tablets, each tablet of 100 mg	
8	Pyrazinamide 500 mg	Blister strip of 10 tablets, each tablet of 500 mg	
9	Combi-Pack	7 combi-packs, each with: -1 rifampicin cap. 450 mg -1 isoniazid tab. 300 mg -1 ethambutol tab. 800 mg -2 pyrazinamide tab. 750 mg	
10	Ethambutol 800 mg	Blister strip of 10 tablets, each tablet with 800 mg	
11	Isoniazid 300 mg	Pack of 10 tablets, each tablet with 300 mg	
12	Rifampicin 450 mg	Blister strip of 10 tablets, each capsule of 450 mg	
13	Pyrazinamide 750 mg	Blister strip of 10 tablets, each capsule of 750 mg	