



# **Central Asia TB Control Partnership**

## **Drug Management TA Visit to Tajikistan**

**November 16-25, 2004**

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**Report date: January 21, 2005**

# EXECUTIVE SUMMARY

## Purpose

This assignment was carried out jointly by Jim Bates and Natalia Cebotarenco of JSI and Movsar Makhmatov and Mavlyuda Mahmudeva of Project HOPE. Their work benefited greatly from the constant and highly effective support of the Ministry of Health's National TB Program and the Project HOPE country team.

The general objective was to assess the current state of TB drug management in Tajikistan, with particular focus on drug management for the pilot DOTS sites. To the extent possible, the assessment was intended to be comprehensive, seeking to cover the following topics: logistics management information systems (LMIS), product selection, forecasting, procurement, inventory control procedures, warehousing and storage, transport and distribution, organizational support, product use, and financing. The findings and recommendations from this exercise were also intended to inform plans for upgrading drug management operations for both the current pilot activities and for the significant DOTS expansion now beginning within the country.

## Key Findings

Due to time constraints, it was not possible to cover all of the drug management topics called for by the SOW. However, the team believes that enough was learned to present useful findings and recommendations for next steps. The Team has noted twenty (20) findings, grouped below under the main functions of the logistics cycle: product selection, procurement, logistics management information (LMIS) and distribution, and product use.

Among these 20 findings, four stand out as highly significant, as follows:

- DOTS coverage is expanding rapidly and a number of new organizations have joined HOPE in assisting MOH in program implementation. At the same time, the current supply of DOTS drugs is finite, giving rise to concern that the separate activities of the different organizations could outstrip the quantities available.
- Despite impressive achievements in implementing an effective distribution system, there is still no means in place by which decision-makers can routinely monitor quantities of drugs in stock or consumption rates.
- In the near future, the National TB Program will receive 75 vehicles from the Global Fund for AIDS, Malaria and TB. Little planning has taken place for determining where individual vehicles should be placed for best results for monitoring and re-supply activities. Related concerns are the limited resources that MOH has available to operate and maintain these vehicles and the absence of maintenance plans.
- And finally, the NTP is wholly dependent on the Global Drug Facility for financing and procuring its DOTS drug supply. Procurement of non-DOTS drugs, and indeed almost all

drugs purchased with Government of Tajikistan funds, is decentralized to the rayon level. Very little is known about these supplies. While there is information available on TB drugs registered for use in Tajikistan, little is known about what products are actually available in the retail sector.

## **Long Term Vision**

As the report findings and recommendations will demonstrate, there are a number of important tasks to be completed in the near future. In addition, the time is not far off when all stakeholders will be asking themselves how to guarantee future availability of DOTS drugs in a changing environment in which, at the very least, donors are expected to play a reduced role in drug financing. It is important to view the current commitment for GDF drugs, and USAID's Central Asia TB Control Project, as assets whose availability provide an opportunity to plan for the security of the DOTS drug supply for the future.

This "commodity security (CS)" can only exist when the MOH and NTP have the capacity to independently manage the following activities:

- Know at all times what quantities of different drugs are required now and for several (five) years into the future.
- Have the capacity to independently manage drug procurements, whether by donation or purchase.
- Have capacities for kitting, storage and transport to assure uninterrupted availability of drugs for clients at TB services delivery points.
- Have the capacity to locate and manage the financing required for procuring an adequate drug supply. Possible sources of financing include government budget funds, grants from donor agencies, development bank loans, and private sector purchases.

While it will certainly take time to develop a credible commodity security strategy, preparatory work needs to start now. Accordingly, many of the recommendations for next steps are for information gathering activities that will contribute to building the CS strategy.

## **Recommendations**

In the body of the report, readers will find the various findings and recommendations suggested by the team, grouped according to the functions of the logistics cycle. For purposes of providing a convenient overview of the drug management activities that lay ahead, the recommendations are listed below. It is important to note that the recommendations within the Procurement and LMIS and Distribution sections relate directly to the four key findings listed above.

## **Product Selection**

1. Assure that all DOTS drugs are registered for use in Tajikistan. (Despite a 2002 WHO report that this has been accomplished, it is not at all clear that this is the case.)
2. Assure that all DOTS drugs are included on the National Essential Drug list. This means listed not only by active principal but also for strength.
3. Review and, if necessary, update the most recent Russian edition of the “Guidelines for Organization, Detection and Treatment by DOTS of Tuberculosis in Tajikistan,” so that information on both the active principals and strengths of DOTS drugs are described as clearly as possible.

### **Procurement**

4. With a view to developing capacity to deal independently with donors and financing bodies, continue to involve NTP staff as much as possible in preparing applications and reporting to GDF.
5. Work with NTP staff to make long term projections of the recurrent costs of drugs and expendable laboratory supplies for both DOTS and non-DOTS treatment.
6. Gather information on present recurrent drug costs of non-DOTS treatment.
7. Convene meetings of the National Coordinating Committee to consider the implications of long-term recurrent costs and begin the process of formulating future financial strategies.
8. Continue to monitor and collaborate in the evolution of the MOH drug procurement center being developed with the assistance of Pharmacists without Borders (PFSCI TA #4269). Continue also to monitor and collaborate in ADB supported drug procurement activities.

### **LMIS and Distribution**

9. Map out the current network of facilities through which DOTS services are delivered. This needs to be done across all four implementing partners.
10. Related to the preceding point, there also needs to be a clarification of the types and numbers of facilities and outreach activities through which DOTS services will be offered in the future so that the scale and reach of the required distribution system may be understood.
11. Clarify how many new cases current GDF supplies can cover. Next, conclude agreements with all implementers on limiting expansion activities to conform to this supply. HOPE should also take the lead in developing a mutually agreed annual expansion plan to conform to the quantities of drugs in the next GDF shipment.
12. Develop a plan that defines the levels at which the new “average weight band kits” will be adjusted and train the staff involved in how to perform this task. The next step after that is to carry out the training.

13. Document across implementing partners the current logistics management information system(s). Although HOPE staff have already provided important details, this work needs to be based on interview and observation at all levels of the system. It would not be surprising to find some variations in the way tasks are carried out, and the design efforts would benefit from incorporating the best ones.
14. On the basis of the information collected for the preceding point, hold a “design workshop” for developing and finalizing a logistics management information system to be used by all partners. Best results will be had if all partners participate in the workshop.
15. Develop a training program and train staff at all levels to use the new LMIS.
16. Map out and document the availability of vehicles and other required transport resources. There is a consensus that this has to be done through direct observation. If done nationally, this is potentially a huge task. Start by working with the other partners to document to situation in all donor-assisted areas.
17. Develop a minimally acceptable maintenance plan for the 75 GFATM financed vehicles that will be procured. Assure that this plan has a robust preventive maintenance component.

### **Product Use**

18. Continue to discuss with MOH senior staff, the importance of coordinating the pace of DOTS expansion with available drug supplies, now and in the future. Attempt to assure that all staff members accept the need for this.
19. Continue the dialog with MOH senior staff on the importance of adhering to the WHO-consistent protocols for DOTS. Enlist their support for terminating the practice of requiring category 1 patients to buy streptomycin for inclusion in their course of therapy.
20. Continue to refine and implement the kit system of distributing drugs to clinical facilities and patients.

# INTRODUCTION

## Purpose

This assignment was carried out by Jim Bates and Natalia Cebotarenco from JSI, and Movsar Makhmatov and Mavlyuda Makhmudova from Project HOPE. Their work benefited greatly from the constant and highly effective support of the Ministry of Health's National TB Program and the Project HOPE country team.

The general objective was to assess the current state of TB drug management in Tajikistan, with particular focus on drug management for the pilot DOTS sites. The SOW intended that to the extent possible, the assessment was to be comprehensive, that is, attempting to cover the following topics: logistics management information systems (LMIS), product selection, forecasting, procurement, inventory control procedures, warehousing and storage, transport and distribution, organizational support, product use, and financing. The intent was also that the findings and recommendations from this exercise would inform plans for upgrading drug management operations for both the current pilot activities and for the significant expansion now beginning within the country.

## Long Term Vision

As the detailed findings and recommendations noted below show, there are an ample number of important tasks that need to be completed in the near future. However, the time is not far off when all stakeholders will be asking themselves how to ensure the availability of DOTS drugs into the future within a changing environment in which, at the very least, donors will play a reduced role in drug financing. It is useful to view both the current commitment of the GDF to supply drugs, and USAID's Central Asia TB Control Project, as assets whose availability provide an opportunity to plan for the security of the DOTS drug supply for the future.

This "commodity security" can only exist when the MOH and NTP have the capacity to independently manage the following activities:

- Know at all times what quantities of different drugs are required now and for several (five) years into the future.
- Have the capacity to independently manage drug procurements, whether by donation or purchase.
- Have capacities for kitting, storage and transport to assure the uninterrupted availability of drugs for clients at TB service delivery points (SDPs).
- Have the capacity to locate and manage the financing required for procuring an adequate drug supply. Possible sources of financing include government budget funds, grants from donor agencies, development bank loans, and private sector purchases.

While it will take time to develop a credible and continuous commodity security strategy for national TB needs, the preparatory work should start now. Accordingly, many of the recommendations set out below are for information-gathering activities that will contribute to building this strategy.

## **ASSESSMENT FINDINGS**

The ten topics listed in the SOW could not be explored in equal detail. Therefore, for this preliminary report, we have grouped the findings and recommendations under four major headings (functions) that summarize the drug management cycle. They are product selection, procurement, logistics management information systems (LMIS) and distribution, and product use.

### **Product Selection**

#### **Findings**

1. The Government's decree 524, put forth in December 2002, establishes DOTS as the key strategy to be implemented by Tajikistan TB Control Program. The Ministry of Health has approved treatment protocols which also conform to WHO norms and specify the following products: RHZE 150/75/400/275; RHZ 150/75/400; RH 150/75; E 400; S 1.0; RH 150/150 and HE 150/400. For patients intolerant to the 4 FDCs, or who need regimen adjustment due to unusual body weight, provision in the MOH regulation is made for Z400 and for other individual drug forms. In addition, for children, the following are included in the MOH protocol: RHZ 60/30/150; RH 150/150; RH 60/60; and RH 60/30.
2. Material provided by HOPE Project staff indicated that as of January 2004, about 2 years after promulgation of Decree 524, RHZE 150/75/400/275 (the Netherlands), RH 150/150 (the Netherlands), S 1.0 (Russia, Ukraine) and E 400 (Russia) were listed as registered for use in Tajikistan. RHZ 150/75/400; RHZ 60/30/150; RH 150/75; HE 150/400; RH 60/60 and RH 60/30 mg were not so listed. However, in November 2004 the WHO Liaison Office stated that all of the drugs being supplied by GDF had been registered by that date.
3. The National Essential Drug List (EDL), in the 2003 edition, listed 6 TB drugs, and the DOTS drugs shown there include E 400, Z 400, RH 60/30, S 1.0 and RH 150/75.. The 4 FDC RHZE 150/75/400/275; the 3 FDCs RHZ 150/75/400 and RHZ 60/30/150; and the 2 FDCs HE 150/400, HR 150/150 and HR 60/60 are not found there.
4. Standard treatment protocols are very important tools for the drug selection procedure and for clear guidance to physicians and nurses. The currently available English edition of the DOTS "Guidelines for Organization, Detection and Treatment by DOTS of Tuberculosis in Tajikistan" tends to be confusing as to the strengths of the drugs to be used. The strengths are not given as the drugs are introduced in the text, leaving readers to leaf through the document to discover this information from various tables. It is important to note, however, that the English edition reviewed by Assessment Team is not the most recent one, and these observations may not be valid for the most recent Russian edition. However to the extent

clarification is needed in either edition, a table similar to the following should be added to provide guidance to the physicians:

Phase of treatment and drugs	Patient body weight (kg)			
	30-37	38-54	55-70	>70
<b>Initial phase (daily) 2 months of treatment</b>				
Cat 1. HRZE (75+150+400+275)	2	3	4	5
Cat 3. HRZ (75+150+400)	2	3	4	5
Cat. 2: to Cat 1. add S (1gr) for 2 months	0.5	0.75	1	1
<b>Continuation phase (daily) 4 months of treatment</b>				
Cat 1. HR (75+150)	2	3	4	5
Cat. 2: add E (400)	1.5	2	3	3
Or: HE (150+400) – 6 months	1.5	2	3	3
<b>Or (three times per week) 4 months of treatment</b>				
HR (150+150)	2	3	4	5
Cat. 2: add E 400	2	4	6	6

5. In general, it appears that there is some non-correspondence in key product selection documents that could, in the future, undermine the sustainability of product selection decisions as well as confuse practitioners when making patient treatment decisions. All documents, training materials and guidance for physicians, and the published standard treatment guidelines should all be made consistent and clear to avoid these risks.

## Procurement

### Findings

1. The MOH does not have a budget line for central drug procurement. TB drug procurements are managed directly by the larger hospitals and rayon (district) governments. The chief of the National TB hospital stated that funds available to him for all purposes for non-DOTS patients amounts to S 0.06 (\$0.02) per patient per day. The chief of the TB control program stated that he had no information on the sources drugs, amounts of money spent, or the quantities TB drugs purchased at decentralized levels. It is assumed that in many cases the supply source is the retail sector.
2. The Center for Drug Expertise is aware of the potential for serious problems arising from the practice of purchasing in the retail sector. By statute, TB drugs require Rx, but it assumed that this requirement is often ignored. The Center believes that it will have more freedom to regulate TB drugs as DOTS expands and good care is available to more people and the population is less dependent on retail purchases. There is some movement toward registering drug retail outlets and classifying them as either over-the-counter (OTC) or Rx stores. The idea is that TB drugs would be moved to the Rx stores and it is believed that it would become more feasible to control them. (This discussion was rather general and it is not clear whether this is a real plan or a matter of thinking out loud.)

3. At the moment, GDF is the only viable option for procuring the DOTS drugs. Early experience with sole MOH management of GDF drugs was suboptimal. This has led to co-management of the GDF procurement between HOPE and the National TB Program. To date, there have been 2 GDF procurements, the first in February 2002, and the second in August 2003. A third procurement is now in process, with a target arrival date of April 12, 2005.

It is difficult to say concretely how long existing stocks will last, because coverage is expanding and the draw down depends on the magnitude of the expansion. At current levels of coverage, stock should last until May 2005, according to HOPE staff.

4. To date, the Ministry has utilized WHO's assistance to prepare GDF applications, and HOPE provides the Ministry crucial monitoring assistance of the GDF drug orders (ensuring the drugs arrive and that the orders are correct). As in other countries, discussions with some counterparts suggest a limited understanding when it comes to the importance of good communications with important investors such as the GDF. Senior MOH staff report with pride high conversion and cure rates, while a GDF Desk Audit Agency notes that the quarterly reports for 2003 had not been provided as called for in the grant agreement.
5. GDF drugs are not being analyzed for quality by the Center for Drug Expertise as part of the registration process. The Center believes that the documentation provided by GDF is not sufficient for informing the assays that they wish to perform. The WHO Liaison Office in Dushanbe feels that the documentation has been sufficient, and that the complaints may originate in WHO's refusal to use the official translation service. MOH senior staff claim that the DOTS Program's conversion rate is 90% and the cure rate is 93%. To the extent that this is true, it tends to validate the quality of the GDF drugs.
6. Although the MOH's current capacities for drug procurement are minimal, there are concrete plans for improving the situation. The MOH, with the assistance of Pharmacist Sans Frontieres (PSF) and financial assistance from the Asian Development Bank, is organizing a procurement center that will manage, as much as possible, international NGO procurements. It is planned to use transparent and competitive procurement procedures, promote quality assurance in the procurement process, and promote standardization of product selection based on the EDL. HOPE will continue to collaborate with the MoH to manage GDF procurements, however. HOPE is the designated recipient of the GFATM grant, and if drugs are procured through this mechanism, PSF serve as the procurement agent.
7. The Asian Development Bank is supporting the development of a long term MOH procurement strategy. This activity is coordinated with, but separate from the PSF NGO procurement operation. Although the ADB activity is still in the strategy development stage, it is envisioned to establish a drug procurement agency within MOH. Some degree of management autonomy is envisioned, but this is not yet defined. One possible mode of operation would be for donors to retain control of funds, but the MOH DPA would carry out all procurement steps, and the donors' banks would release funds when the donors were satisfied that correct procedures have been followed. (This model has been used elsewhere.)

To avoid duplication, the PSF NGO procurement center will be merged with the new MOH drug procurement agency at an appropriate time, hopefully soon after the agency becomes operational, which may be as soon as February 2005. Significantly, neither the PSF NGO procurement center nor the MOH drug procurement agency will handle DOTS drugs so long as the HOPE/GDF procurement activity is operating. HOPE has indicated that although DOTS drugs are vertically managed at the moment, it does not wish to encourage establishment of a permanent vertical system. With this in mind, HOPE plans to collaborate wherever possible with the MOH procurement agency. One concrete example of such collaboration will be in the design of the DOTS drug LMIS - to assure that it provides all of the required information.

## **LMIS and Distribution**

### **Findings**

1. Tajikistan has 4 oblasts (regions) and 65 rayons (districts). The numbers of rayons per oblast ranges from 8 to 26. Altogether MOH operates 370 clinical facilities, ranging from 26 specialty hospitals to 217 rural hospitals. A very quick scan suggests that about 313 sites are of a type where DOTS services should eventually be provided. Based on these very gross numbers, there may be envisioned a DOTS network in which, on average, each rayon provides DOTS services such as drug dispensing and observation plus sputum collection through 5 sites. (The number of sites providing microscopy services would be fewer.) Variations in geography and population density mean that this figure conceals a broad range. Hopefully, however, this simple model gives a sense of the eventual scale to be achieved by a DOTS drug distribution system.

For the present, there are 4 organizations attempting to implement DOTS in 18 rayons. The organizations are HOPE, SINO, Merlin and the MOH. There does not exist at this time any mapping across implementing organizations of the numbers of sites by type in which they are implementing DOTS.

In 2005, based on information available at the moment, these organizations expect to add additional 19 rayons. That is, in "rayon terms", coverage may double in 2005.

2. Apart from HOPE, the three other international partners have been in the DOTS business in Tajikistan for less than a year.. Of concern are ambitious plans attributed to Merlin, through which that organization will add 15 rayons to the 7 in which they currently operate for a total of 22. Merlin expects to begin adding new rayons in January 2005 and be operating in all 22 by April/May 2005. Two major concerns arising from this velocity of expansion are:
  - Expansion is taking place before impact measures such as conversion and cure rates can be evaluated.
  - Expansion is proposed without reference to the quantities of drugs available in country. The next GDF shipment is not expected until May and over-rapid expansion before then could conceivably result in interruptions of DOTS treatment at many sites.

3. At present, Tajikistan uses a kit system to distribute DOTS drugs. The kits are prepared in country for the Ministry by the “Unitary Manufacturing Company Tajikfarmindustriya,” an institution established in 1992. The kits are specific to patient weight bands (4), treatment category (3) and the treatment phases (2). Thus altogether, there are 24 different types of kits. The types of kits required for each case can be determined at registration. This approach relieves health workers of the burden of calculating the numbers of different pills that should be in each patient’s kit.

The next GDF shipment will, however, bring an important change: The supplier will pack the kits according to GDF specifications. The drugs will arrive in kits based on an average weight band, and it will be necessary to adjust them in country to the actual weights of patients. Specific plans as to where and how this will be done and how concerned staff will be trained to accommodate this development have not yet been formulated, though HOPE staff are aware of these important issues.

4. The distribution system currently has two or three tiers, depending on the sites served. When kits are sent directly from the central warehouse to the Republican TB Hospital, there are two tiers, and when they are sent to rayon hospitals via the DOTS storeroom at the Oblast Hospital, there are 3 tiers. For the oblasts, there is a six month stock and for the rayons and Republican TB hospital 3 months. The months of stock at the central warehouse are difficult to estimate because it is a variable that depends on the rate of expansion and the detection rate. Delivery intervals are annual from GDF at the central level; six-monthly from central warehouse to oblast; and quarterly from oblast to rayon. From rayon to clinical facilities, delivery is based on patient registration.

At the small number of storage and dispensing sites visited, it appeared that stock accounting was carried out correctly. At this time, at least in the HOPE pilot sites, there is no means by which decision makers at central level can monitor stock levels, consumption and losses at lower levels. None of this data rises up the system from any level and decision-makers at oblast and national level receive no reports containing aggregations of these data. This means that important information for informing forecasting and procurement is not available.

5. MOH has very limited resources for drug distribution. This is no doubt related in part to the fact that most MOH drugs are purchased at local levels. NGOs and donors are taking responsibility for drug distribution for their respective programs. According to National TB and HOPE staff, MOH itself has a few passenger vehicles at the central level across the health sector. Most rayons have a passenger vehicle, though it has to serve multiple purposes and is not dedicated to drug supply. One question that informants were unable to answer is whether or not suitable trucks for distribution (of any size) are available at any level.

In response to questions related to hiring transport services, the consensus answer was that, if this occurs at all, it is rare. Informants believe there are no budget lines for purchasing transport services. MOH budgets do have line items for fuel, but informants felt that funds for lubricants, spare parts and repair maintenance were not reserved.

Under a GFATM – not to be confused with GDF -- grant managed by HOPE, there is a budget line for 75 vehicles. Fifteen will be purchased in the first phase of the grant, which began this year. Except for a general idea that the vehicles will be used for multiple purposes under the general heading of monitoring, there is no specific plan for their use currently.

## **Product Use**

### **Findings**

1. A key TB Control Program staff member expressed the opinion that geographical expansion of the DOTS program should not be constrained by the availability of the GDF drugs. He said that if the expansion outstrips the GDF supply, patients could simply buy the required drugs in [government] drug stores. The Assessment Team has not done a shelf check to verify drug availability in drug retail outlets, but it is not at all clear that all DOTS drugs are registered and available in the retail sector. Due to the expense of long multi-drug courses of treatment, it is unlikely that most patients could either afford to purchase drugs at all, or afford to purchase full courses of treatment.
2. In December 2002, a WHO mission noted that “the Tajikistan TB Control Program treating category 1 patients with regimen 2SRHZ/4R3H3 (sic).” It expressed concern that shortages of streptomycin would occur as a result of this practice and recommended complying with the norm 2RHZE/43H3. According to informants, in response to this recommendation, the NTP stopped using GDF for this purpose but required at least some patients to buy streptomycin and apply it to their regimens. Both this finding and the preceding one raise concerns about commitment to DOTS treatment and point to the possibility that individuals may make arbitrary changes here and there, based on personal preferences, and significantly compromise the overall program.
3. In WHO’s “Fourth Mission on DOTS Implementation in Tajikistan”, they noted that the kit system was “found too complicated”. It was recommended that the MOH “stop kit packaging”, but the Mission report provided no supporting information for either the finding or the recommendation. We visited a number of sites to observe kit system operations. They included the packaging facility, the National TB Hospital, and four polyclinics. At dispensing points, doctors and nurses were able to answer all questions about how the kits work, including questions about loose packed drugs for extension phases and children. We specifically asked about any problems that the system might be causing, and none of the staff interviewed identified any problems. In an interview with the Assessment Team, Dr. Sirojiddinova, Tajikistan’s leading TB expert described the kit system as “useful.” Based on what we have read, seen, and been told, the WHO recommendation to stop kit packaging is unsubstantiated and seems unwarranted; if WHO feels strongly about this view, they should share the supporting information they have related to problems with the kit system.

# **RECOMMENDATIONS**

## **Product Selection**

### **Recommendations**

1. Due to the nature of the sources used it is not 100% clear that all of the problems suggested above are valid. For example, although we did not see documentary evidence that all GDF drugs are now registered, this may well be the case, as reported by WHO. So the first recommendation is that HOPE country staff review all available documentation and check with the Center for Drug Expertise to definitively verify the registration status of GDF drugs.
2. For the question of DOTS products on the EDL, the documents suggest more clearly that there is a problem here. HOPE country staff should work with MOH counterparts to assure that all DOTS products are included in the next edition of the EDL. This means not only by active principal but also by strength.
3. The most recent Russian edition of the “Guidelines for Organization, Detection and Treatment by DOTS of Tuberculosis in Tajikistan,” should be checked to assure that information on the strengths of specific DOTS drugs is presented more clearly than it has been presented in the English edition reviewed for this report.
4. All selected TB drugs to treat TB (based on the Standard Treatment Regimens approved by NTP) should be included on the Essential Drug List (EDL) of Tajikistan. This process has to be started by the Thematic Working Group on TB drug management which is to be established soon. Inclusion on the EDL helps ensure the procurement of approved drugs only. (It may be necessary to provide specialized training to the TB drug selection committee on topics such as FDC use, packing, and function within the DOTS strategy.)

## **Procurement**

### **Recommendations**

1. It is important to continue to involve TB Control Program staff in such activities as preparing applications and reporting.
2. Sooner or later, the GDF grants will wind down and, when that happens, the biggest problem confronting the DOTS program will be financing. The Director of the TB Control Program spontaneously expressed his concern on this point. With this in mind, HOPE drug management staff should assist by projecting the recurrent costs of DOTS drugs using appropriate scenarios for coverage and incidence.
3. Normally the best way to make recurrent cost projections for the future resonate with counterparts is to compare them with current expenditures and give a sense of the looming gap. As noted, however, due to the decentralized nature of non-DOTS TB drug procurements,

it would be difficult to aggregate this information on a nation-wide basis. Under these circumstances it is recommended that HOPE staff collect TB drug expenditure information on a sample survey basis and make per patient estimates of the expenditures at sample sites. The results could be aggregated and compared with per patient-denominated DOTS estimates.

4. Convene meetings of the National Coordinating Committee to consider the implications of the long-term recurrent costs and begin the process of forwarding future financial strategies.
5. Continue to monitor and collaborate in the evolution of the PSF and ADB supported drug procurement activities. A more concrete recommendation in this regard is made in the following section.

## **LMIS and Distribution**

### **Recommendations**

1. Over the life of the project major objectives will be to have a functioning LMIS, a pipeline structure that balances financial efficiency with constant product availability, and a rational monitoring and distribution system . In general, however, not enough concrete details are known to proceed from where we are now directly to system design activities. A number of information gathering activities are required for which HOPE staff are well qualified by education and experience.
2. Map out the current network of facilities through which DOTS services are delivered. This needs to be done across all four implementing partners.
3. Related to the preceding point, there also needs to be a clarification of the types and numbers of facilities and outreach activities through which DOTS services will be offered in the future so that the scale and reach of the required distribution system may be understood.
4. Clarify how many additional cases current GDF supplies can cover. Next, conclude agreements with all implementers on limiting expansion activities to conform to this supply. HOPE should also take the lead in developing a mutually agreed annual expansion plan to conform to the quantities of drugs in the next GDF shipment.
5. Develop a plan that defines the levels at which the new “average weight band kits” will be adjusted and train the staff involved in how to perform this task. The next step would be to carry out the training.
6. Document across implementing partners the current logistics management information system(s). Although HOPE staff have already provided important details, this work needs to be based on interview and observation at all levels of the system. It would not be surprising to find some variations in the way tasks are carried out, and the design efforts would benefit from incorporating the best ones.

7. On the basis of the information collected for the preceding point, hold a “design workshop” for developing and finalizing a logistics management information system to be used by all partners. Best results will be had if all partners participate in the workshop.
8. Develop a training program and train staff at all levels to use the new LMIS.
9. Map out and document the availability of vehicles and other required transport resources. There is a consensus that this has to be done through direct observation. If done nationally, this is potentially a huge task. Start by working with the other partners to document to situation in all donor assisted areas.
10. Develop a plan of action for the proposed GFATM financed vehicles that are to be procured, particularly in regard to what types of vehicles, and how many vehicles, are actually needed. This plan will need to include reasonable estimates for operating costs, maintenance costs, and a robust preventive maintenance component.

## **Product Use**

### **Recommendations**

1. Continue to discuss with MOH senior staff, the importance of coordinating the pace of DOTS expansion with available drug supplies, now and in the future. Attempt to assure that all staff members accept the need for this.
2. Continue the dialog with MOH senior staff on the importance of adhering to the WHO-consistent protocols for DOTS. Enlist their support for terminating the practice of requiring category 1 patients to buy streptomycin for inclusion in their course of therapy.
3. Continue to refine and implement the kit system of distributing drugs to clinical facilities and patients.

## LIST OF PARTICIPANTS AT THE VARIOUS MEETINGS OF THE DRUG ASSESSMENT MISSION TEAM

<b>Organization</b>	<b>Name</b>	<b>Position</b>
Ministry of Health of the Republic Tajikistan	Mr. Temurov A.A	First Deputy of Minister of Health of the Republic Tajikistan
Ministry of Health of the Republic Tajikistan, Pharmacy and Medical Equipment Department	Mr. Marufov A.G	Expert of MoH Pharmacy and Medical Equipment Department
State Center for Drug Expertise	Mr. Kholnazarov B. Mr. Davlyatov M.K.  Mr. Sufiev T.D. Mr. Kadamov I.M. Mrs. Norova D. Mr. Mukimov A.	General Director of State Center for Drug Expertise Deputy of General Director of State Center for Drug Expertise Head of registration department of SCDE Head of licensing department of SCDE Head of certification department of SCDE Head of preclinical and clinical expertise department of SCDE
WHO office in the RT	Mrs. Artikova N.P.	Liaison Officer, WHO Office, Tajikistan
Republican Central warehouse in Dushanbe	Mr. Kasimov S.	Head of Republican Central warehouse in Dushanbe
Open joint stock company «Dorui Tojik»	Mr. Kholov A.K.	General Director of Open joint stock company «Dorui Tojik»
Project PSF CI –ADB TA No 4269	Dr. Bruno Clary	Consultant of Project PSF CI –ADB TA No 4269
Republican TB control Center	Mr. Saidaliev S.M	Director of Republican TB control Center
Ministry of Health of the Republic Tajikistan	Mrs. Sirojiddinova U.Y.	Leading specialist on TB
Republican TB control Center	Mr. Norov O.J.	National coordinator on Drug management
Medical warehouse of the City TB control Center	Mrs. Nazarova M.	Head nurse of Medical warehouse of the City TB control Center
DOTS –centers	Mr. Juraev Kh.J.	Coordinator of DOTS strategy of City polyclinic #2
City Family ambulatory	Mrs. Mamadaezova D.	Family doctor
TB Control Center in Rudaki rayon	Mr. Saidrakhmonov B.	Head of TB Control Center, Coordinator of DOTS strategy of DOTS –center #1 of Rudaki rayon
TB Control Center in Rudaki rayon	Mr. Makhmadov O.A.	Head doctor
DOTS –center Rudaki rayon	Mrs. Kurbanbekova M.	Coordinator of DOTS strategy of DOTS –center #2 of Rudaki rayon
DOTS –center Rudaki	Mrs. Burieva Z.	Coordinator of DOTS strategy of DOTS –center #3

rayon		of Rudaki rayon
Republican TB hospital Machiton	Mr. Rustamov S.R.	Head Doctor of Republican TB hospital Machiton
Medical warehouse of the Republican TB hospital Machiton	Mrs. Safaraliev D.	Head nurse of Medical warehouse of the Republican TB hospital Machiton
Central Rayon hospital of the Rudaki	Mr. Umirzakov M.	Head Doctor of the Central Rayon hospital of the Rudaki
Medical warehouse of the TB control Center in the Rudaki Rayon	Mr. Tukhtarov M.	Head of Medical warehouse of the TB control Center in Rudaki Rayon
Oblast TB control Center in Kulyab city	Mr. Ismailov	Depute Head Doctor of Oblast TB control Center in Kulyab city
TB control Center in Voseyskiy rayon	Mr. Sharipov	Head Doctor of Oblast TB control Center in Voseyskiy rayon
Medical warehouse of the TB control Center in Voseyskiy rayon	Mr. Mirzoev S.	Head nurse of Medical warehouse of the TB control Center in Voseyskiy rayon
Oblast TB Dispensary in Kulyab city	Mrs. Abdualimova	Head Doctor
Oblast TB control Center in Kulyab city	Mr. Olimov A.	Coordinator on Drug Management
Oblast TB control Center in Kulyab city	Mr. Mirzoev R.	Head nurse of Medical warehouse of the TB control Center in Kulyab city

## LIST OF PARTICIPANTS IN LSAT MEETING

<b>Organization</b>	<b>Name</b>	<b>Position</b>
Republican TB control Center	Mr. Saidaliev S.M	Director of Republican TB control Center
Ministry of Health of the Republic Tajikistan	Mrs. Sirojiddinova U.Y.	Leading specialist on TB
Republican TB control Center	Mr. Norov O.J.	National coordinator on Drug management
Project HOPE	Mr. Tom Mohr	Project manager
Project HOPE	Mrs. Idrisova M.	TB specialist
Project HOPE	Mrs. Maksumova	Monitoring team leader
Project HOPE	Mrs. Makhmudova	Regional specialist of Drug Management for Tjk and Trk
Project HOPE	Mrs. Rakhmonova	Drug monitor

## PLACES VISITED DURING THE ASSESSMENT

1.	Ministry of Health of the Republic Tajikistan
2.	State Center for drug expertise
3.	WHO office in the RT
4.	Republican Central warehouse in Dushanbe
5.	Open joint stock company «Dorui Tojik»
6.	Republican TB control Center
7.	City TB Control Center, Medical warehouse of the City TB control Center
8.	DOTS –centers in Rudaki rayon (DOTS 2, DOTS 3)
9.	City Family ambulatory
10.	Republican TB hospital Machiton, Medical warehouse of the Republican TB hospital Machiton
11.	Central Rayon hospital of the Rudaki
12.	TB Control Center in Rudaki rayon, Medical warehouse of the TB control Center in the Rudaki Rayon
13.	Oblast TB control Center in Kulyab city
14.	TB control Center in Voseyskiy rayon, Medical warehouse of the TB control Center in Voseyskiy rayon
15.	Oblast TB Dispanser in Kulyab city

## **DOCUMENTS CONSULTED**

Zagorsky and others, “GDF Country Visit – Tajik Republic, May 22 – 29, 2001,” WHO, 2001.

“DOTS Implementation in Tajikistan, December 11 – 22, 2001, WHO, 2001.

P-Y. Norval and others, DOTS Implementation in Tajikistan, November 22 – December 2, 2002,” WHO, 2002

Ministry of Health, “Draft Guidelines on Organization, Revealing and Treatment of Tuberculosis in Tajikistan by DOTS Strategy,” Government of Tajikistan, 2003.

B. Clary and others, Legislative and Normative Documents Regulating Public Health Services,” ADB, 2003.

Mohr and others, “[Tajikistan] In-Country Monitoring Check List for 3<sup>rd</sup> Year of Support, Global TB Drug Facility,” WHO 2004.

Project HOPE, “Final Assessment and Evaluation Report, Tuberculosis Program Implementation in the Central Asia Republics,” 2004.

GDF Desk Audit Agency, “Desk Audit Report Tajikistan July 2005,” WHO 2004