

ASIAN DEVELOPMENT BANK

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**PROPOSED
TECHNICAL ASSISTANCE
FOR
EMERGENCY REGIONAL SUPPORT TO ADDRESS THE OUTBREAK OF
SEVERE ACUTE RESPIRATORY SYNDROME (SARS)**

May 2003

ABBREVIATIONS

ADB	–	Asian Development Bank
ADBBO	–	ADB Business Opportunities
ASEAN	–	Association of Southeast Asian Nations
PRC	–	People's Republic of China
DMC	–	developing member country
IEC	–	Information, education, and communication
NGO	–	nongovernment organization
RSAN	–	Agriculture, Natural Resources and Social Sectors Division
RSDD	–	Regional and Sustainable Development Department
SARS	–	severe acute respiratory syndrome
TA	–	technical assistance
TB	–	tuberculosis
WHO	–	World Health Organization

NOTE

In this report, "\$" refers to US dollars.

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I. INTRODUCTION

1. The Asian Development Bank (ADB), as the leading development institution for the Asia and Pacific region, has a crucial role in responding to regional emergencies. The recent outbreak of severe acute respiratory syndrome (SARS)¹ in a number of economies in the region (primarily the People's Republic of China (PRC); Hong Kong, China; Taipei, China; Singapore; and Viet Nam) is an international emergency due to the possibility of a major epidemic, with high human death toll and adverse effects on health services, and on political and economic stability; with long-lasting social and economic damage to the region and its institutions; and which may disproportionately affect poor and vulnerable groups. While the scale of the epidemic is still uncertain, given the gravity of potential scenarios, immediate action is essential. Based on assessments of leading institutions like the World Health Organization (WHO) and the United States' Center for Communicable Diseases Control, an emergency response is required throughout the region. Accordingly, ADB is called upon to use its financial and technical resources to mount such a response, addressing immediate needs and long-term preparedness, in support of developing member countries (DMCs) and in close coordination with other development partners in the region.

2. On 25 April 2003, the President requested an emergency action plan to address outbreak of SARS in the region. ADB's SARS Crisis Response Team met from 25 April to 2 May 2003 and developed a comprehensive proposal,² approved by the President on 7 May 2003, to meet the immediate needs of SARS-affected and potential SARS-affected developing member countries (DMCs). The proposal included the development of an emergency regional technical assistance (TA) that will enable ADB to assist its DMCs, in a flexible manner, to prevent, reduce and eliminate the spread of SARS in DMCs.³

II. ISSUES

3. The SARS epidemic that is currently sweeping East Asia poses to the region an extremely serious threat that requires an immediate response to control its spread. At present, little is known about the origin of the SARS virus or how it is spread. Although SARS appears to have originated in southeastern PRC, it has spread quickly and has been reported in around 30 countries and territories. Increased regional trade and globalization have spread of the SARS epidemic. As of 8 May 2003, there were 7,053 cases of SARS worldwide and 506 deaths.⁴ The fatality rate from SARS appears to be quite high, at around 15-20% (up to 55% for patients over 60⁵). Current treatment is not very effective against SARS. Laboratories are working on

¹ SARS is an acute systemic viral infection starting with influenza-type symptoms like fever and headache, likely transmitted through infected air droplets or other body particles from patients and possibly carriers, and often progressing into severe pneumonia with reported case fatality rates of up to 20% in adults and 50% in the elderly.

² ADB. 2003. *Action Plan To Address Outbreak of SARS in Asia and the Pacific* (Online). Available: <http://www.adb.org/Documents/Others/SARS/SARS_Action_Plan.pdf>

³ The TA first appeared in *ADB Business Opportunities* (Internet version) on 12 May 2003.

⁴ Unless otherwise specified, all data related to SARS are from official WHO reports.

⁵ *Christl A Donnelly, Azra C Ghani, Gabriel M Leung, Anthony J Hedley, Christophe Fraser, Steven Riley, Laith J Abu-Raddad, Lai-Ming Ho, Thuan-Quoc Thach, Patsy Chau, King-Pan Chan, Tai-Hing Lam, Lai-Yin Tse, Thomas Tsang, Shao-Haei Liu, James H B Kong, Edith M C Lau, Neil M Ferguson, Roy M Anderson* "Epidemiological determinants of spread of causal agent of SARS in Hong Kong" *The Lancet*, 7 May, 2003 (Online). Available: <http://www.thelancet.com/journal/vol361/iss9368/full/llan.361.9368.early_online_publication.25595.1>

developing a possible vaccine, but it is not possible to estimate when this will be ready and effective.

4. Given the lack of understanding about how the disease spreads and the potential for it to spread, early action to limit and control the spread of SARS is a key international public good. The poor and rural populations may be at particular risk due to the lack of access to hospital services and limited capacity to diagnose the disease properly. SARS could become a pandemic with major loss of life throughout the world.

5. SARS is already having a major economic, social, and psychological impact on the population of the countries most affected by the disease. Initially, the economic impact has hit travel-related industries the hardest. If the SARS contagion continues for several months, foreign direct investment, labor remittances, and exports are also likely to be negatively affected.⁶ Beyond the economic costs, SARS is also generating significant social costs. Schools in many SARS-affected countries have been closed for extended periods of time. The health system in many countries is under strain due to weak infrastructure, low availability of medicine, and increased risk for health workers. The impact on the health sector could rise exponentially as the epidemics spreads to poor countries with limited disease control and treatment.

6. Stopping the spread of SARS requires significant, decisive, and coordinated action by all stakeholders. The lessons learned from successful countries show the importance of acting in a transparent and decisive manner to fight SARS. This requires the mobilization of support on domestic and international fronts.

7. The health sector is on the front line of the battle against the SARS epidemic, both in its role as provider of health services to the public and as victims in terms of the high toll SARS has already taken on health sector workers. Key categories of need include

- (i) the capacity of the public, private, and NGO-managed health sector to assess and monitor the SARS epidemic (and other emerging diseases);
- (ii) the capacity of the health sector to handle and cure suspected and probable SARS patients (health facilities, medical and laboratory equipment, and supplies);
- (iii) the immediate needs of health personnel for information, protection, and training;
- (iv) basic information, education, and communication (IEC) campaigns for health professionals and the public on SARS; and
- (v) hygienic disinfection and appropriate sanitary measures in affected areas.

8. In many DMCs, governments and health systems are ill-prepared to deal with SARS. Many governments have a tight fiscal balance, and cannot mobilize resources quickly. ADB has an important role to play, in coordination with WHO and other partners, to help build the emergency response in affected countries and other countries at risk in the region. Using its network of staff and financial resources, ADB can draw upon active social sector projects in most of its DMCs to quickly mobilize urgently needed inputs to combat SARS.

⁶ ADB. 2003. *SARS: Economic Impacts and Implications*, ERD Policy Brief No. 15. Manila (Online). Available: <http://www.adb.org/Documents/EDRC/Policy_Briefs/PB015.pdf>

III. THE PROPOSED REGIONAL TECHNICAL ASSISTANCE

A. Purpose and Output

9. The proposed TA will provide emergency assistance to strengthen DMCs' health systems' capacities to help prevent and contain outbreaks of SARS over the next six months. The proposed TA will fill gaps identified in financing to meet the SARS epidemic. ADB will work closely with governments, WHO, and other stakeholders, in particular nongovernment organizations (NGOs), to identify the gaps, both quantitatively (how much is needed) and qualitatively (where are the resources needed). The magnitude of the damage the SARS epidemic will cause is difficult to estimate, but ADB should be prepared to respond quickly and flexibly to the actual and potential damage caused by SARS. Although completing the task of strengthening health systems' capacity to prevent and contain SARS and other outbreaks will require a medium- to long-term effort, the emergency measures implemented under the TA can provide important first steps. The TA framework is contained in Appendix 1.

B. Methodology and Key Activities

10. Given the uncertain and evolving nature of the SARS epidemic, the design of the TA is necessarily flexible to meet the emerging needs of DMCs. ADB staff will work with governments, WHO, development partners, NGOs and other stakeholders to determine each country's urgent financial needs to combat SARS. In broad terms, the TA will have three components (Appendix 2 outlines some possible activities).

11. **Emergency Assistance to SARS-Affected and Potentially SARS-Affected Countries.** The main priority of the TA will be to provide initial support to build the capacity of health systems to prevent and control SARS. This assistance will support public health assessment, surveillance, training, and institutional capacity building (all of which may include the emergency provision of public health equipment, material, and supplies); standardized procedures for screening and restricting cross-border travelers; and information and education campaigns on SARS. Beneficiaries should be key partners, such as ministries of health, local health authorities, and NGOs. The TA can also work in coordination with regional initiatives such as implementing agreements in the Association of Southeast Asian Nations (ASEAN) Joint Declaration Of The Special ASEAN Leaders Meeting On SARS, Bangkok, Thailand, 29 April 2003, and the proposed joint initiative between the South Pacific Commission and ADB: Support to the Development of Communicable Diseases Surveillance In the Pacific Region. The emergency assistance will be determined based on country and regional needs assessment and local capacity to respond to immediate SARS-related needs.

12. **Economic Impact Assessments.** To address the needs of countries to assess the risks that they face from SARS, the TA will support rapid assessments of the capacity of health systems to deal with SARS and the potential effect of SARS on the economy. This will help improve DMCs' understanding of the potential effects of SARS on their socioeconomic patterns and allow for the preparation of appropriate responses. Other assessments are ongoing, but this component will fill gaps in analysis needed to carry out the work of the other two components. The TA will also facilitate aggregation of assessments and other emerging SARS knowledge across DMCs to allow effective sharing of good practices and to better enable a regional approach to SARS issues.

13. **Analysis of Required Investment Response.** This component includes the provision of small-scale project preparatory TA for additional short- and medium-term responses to the

SARS epidemic and other emerging contagions. ADB and other financial institutions are already carrying out preliminary work in some DMCs. This component will provide additional technical support to assist in the redesign of existing investments by ADB and other financiers, and will facilitate the development of future investment projects to meet long-term needs for communicable disease control.

14. The TA will support expert services and required related facilities. Other funding agencies may be providing SARS-related TA in a given member country. ADB has contacted 22 DMCs⁷ considered to be affected by or at risk to SARS. Some countries have already indicated willingness to participate, and most others are expected to join.

C. Cost and Financing

15. The total cost of the TA is estimated at \$2 million equivalent. The TA will be financed on a grant basis by ADB's TA funding program. ADB and its partners will also actively seek additional grant cofinancing. Appendix 3 contains the cost estimate and financing plan. Given the need for a flexible response, the estimates are likely to change as the TA evolves.

D. Implementation Arrangements

16. The TA will be implemented by ADB. The Agriculture, Natural Resources, and Social Sector Division (RSAN) of Regional and Sustainable Development Department (RSDD), in association with concerned divisions in the regional departments, will be responsible for all TA activities. The SARS Crisis Team, comprising representatives of central and regional departments within ADB, will serve as the TA team. The principal regional cooperation specialist of the Governance and Regional Cooperation Division will coordinate the team's activities, with the senior health and nutrition specialist of RSAN as alternate. The implementation of TA activities may be delegated to operational divisions concerned as appropriate. Each participating DMC will designate an institutional focal point, and a project coordinator as the key person to interact with other government agencies, and with the consultants appointed under the TA. Regional organizations such as ASEAN may also appoint a project coordinator to participate on behalf of their members. With technical guidance from WHO (in line with a memorandum of understanding being formulated separately), the SARS Crisis Team and Director, RSAN, will review and approve requests for assistance. These will be initiated by project coordinators on behalf of their countries, working jointly with the concerned regional department (and in dialogue with WHO, as needed) to formulate a simplified technical assistance paper, which will consist of a short description of the needs, a brief implementation strategy indicating the national or regional implementing agency, a proposed budget, and (where applicable), outline terms of reference for consultants and list of items to be procured. Participating DMCs will make in-kind contributions in the form of office space, local travel, remuneration of counterpart and supporting staff, office facilities and utilities, and workshop support.

17. A steering committee comprising directors of the concerned divisions in ADB's regional departments and RSDD will provide overall guidance to and supervision of the TA activities, and will endorse criteria for eligibility and prioritization. These criteria will ensure incentives for quick response, focus on priority countries, and efficient use of limited resources. The criteria may be modified as the SARS outbreak evolves, and if additional resources become available.

⁷ Afghanistan, Bangladesh, Bhutan, Cambodia, the PRC, East Timor, India, Indonesia, Kazakhstan, Kyrgyz Republic, Lao Peoples' Democratic Republic, Malaysia, Mongolia, Nepal, Pakistan, Papua New Guinea, Philippines, Sri Lanka, Tajikistan, Thailand, Uzbekistan, and Viet Nam.

18. TA implementation arrangements will provide flexibility to allow adjustment in the terms of reference of consultants, duration, and schedule of expert inputs. In dialogue with local authorities, ADB will establish appropriate mechanisms to handle requests for funding. Domestic and international consultants will be selected based on identified needs and country capacities. Consultants will be engaged as individuals, in accordance with ADB's *Guidelines on the Use of Consultants* and other arrangements satisfactory to ADB for the engagement of domestic consultants. Resource speakers will be directly selected to facilitate the training, development, and dissemination of information, education, and communication (IEC) materials. Other consultant recruitment will follow the ADB's procedures with reasonable flexibility, such as waiving of standard provisions for ADB Business Opportunities (ADBBO) listing and shortened processing timing for negotiations and contracts. If direct selection is deemed necessary to recruit consultants other than resource speakers during TA implementation, appropriate approval authority will be sought on a case-by-case basis. Related facilities and supplies will be procured in accordance with arrangements acceptable to ADB. Indicative procurement options are included in Appendix 3.

19. The TA will be implemented from May to December 2003. Given the need for flexibility, monthly reviews will assess implementation arrangements and adjustments will be made as appropriate.

IV. THE PRESIDENT'S RECOMMENDATION

20. The President recommends that the Board approve the provision of technical assistance not exceeding the equivalent of \$2,000,000 on a grant basis for Emergency Regional Support to Address the Outbreak of Severe Acute Respiratory Syndrome (SARS).

TECHNICAL ASSISTANCE FRAMEWORK

Design Summary	Performance Targets	Monitoring Mechanisms	Assumptions & Risks
Goal (long-term objective)			
Improved capacity for communicable disease control	Spread of communicable diseases, including SARS, are halted and/or controlled.	WHO and Governments' statistics	
Purpose (immediate objective)			
Strengthen health systems' capacities to help prevent and contain outbreaks of the SARS contagion in the next 5 months.	SARS transmission rates decreased or blocked.	Socio-economic assessments, Center for Disease Control and Prevention (CDC), WHO, and other technical reports	Governments' commitment SARS control possible, particularly in poor, rural areas
Outputs			
<p>1. Emergency assistance to SARS-affected and potentially SARS-affected countries</p> <p>a. Rapid assessments of the capacity of health systems to deal with SARS</p> <p>b. Increased public health surveillance</p> <p>c. SARS- related training of public health personnel</p> <p>d. Standardized procedures for screening and restricting cross-border travelers for SARS</p> <p>d. Information and education campaigns on SARS.</p> <p>2. Health and economic assessments on the potential effect of SARS.</p> <p>a. Rapid assessments of the potential effect of SARS on the economy</p>	<p>Rapid health system assessments are completed in all interested countries by June 2003</p> <p>Surveillance system and infection control measures in place by October 2003</p> <p>Training programs for public health and medical staff designed and implemented by October 2003</p> <p>Cross-border screening procedures harmonized across interested countries by October 2003.</p> <p>Equipment and emergency supplies provided</p> <p>Effective information regional and national campaigns launched (June 2003)</p> <p>Rapid economic assessments of all interested countries are completed in all interested countries by December 2003</p> <p>SARS-related knowledge and best practices are collected and posted on the ADB SARS website, and updated at least twice a week.</p>	<p>Regular CDC, WHO, and other reports</p> <p>Progress reports on levels and quality of public awareness</p> <p>Memoranda of Understanding signed</p> <p>Project Implementation Progress reports</p> <p>Strategies and project documents</p>	<p>Willingness of ADB and partners to work effectively together</p> <p>Transparent access to information</p> <p>Media support</p> <p>Competent/motivated consulting services</p> <p>Availability of material and equipment</p> <p>Delivery mechanisms satisfactory</p> <p>Sustained commitment and control</p> <p>Efficient procurement of goods and hiring of consultants</p>

Design Summary	Performance Targets	Monitoring Mechanisms	Assumptions & Risks
<p>b. Consolidated assessments and other emerging SARS knowledge across DMCs for effective sharing of good practices</p> <p>3. Analysis of required Investment response</p> <p>a. Small scale project preparatory technical assistance (PPTA) for additional short- and medium-term responses to the SARS epidemic and other emerging contagions.</p>	<p>PPTAs in requesting countries are completed by December 2003.</p>		
Inputs			
<ol style="list-style-type: none"> 1. Consultants 2. Training 3. Medical Equipment 4. Personal Protective Equipment for Health Workers and other personnel at risk 5. Laboratory Equipment for Public Health Surveillance, Hospital, and Quarantine Units 		<p>TA monitoring data and other progress reports</p> <p>Project Accounts</p>	<p>Consultants are available.</p> <p>Equipment is available</p> <p>Existing public health surveillance systems are rudimentary.</p> <p>Procurement and contracting arrangements are well-managed.</p>

OPTIONS FOR ACCESSING RESOURCES UNDER THE TA

1. For all participating countries, assistance falls into three broad categories.

A. Health Sector Assistance

2. Goods, consultants, and personnel should play a role in preventing the spread of severe acute respiratory syndrome (SARS) and in organizing the

- (i) training and capacity building for health workers;
- (ii) personal protective equipment for health workers and other personnel at risk;
- (iii) medical equipment necessary for trained health workers; and
- (iv) laboratory equipment for public health surveillance, hospital, and quarantine/isolation units.

B. Data Collection and Statistical Analysis of SARS' Prevalence and Multiple Impacts on Population Health and Economy

3. Eligible items include specialized software for epidemiological and economic analysis, special rapid surveys, training, and consultants. Ongoing epidemiological assessment and a special health information system adaptable to decentralized management may be amplified; computer-based surveillance infrastructure support, with related procurement of equipment, may be purchased.

4. Support for national or subnational regional health education campaigns to alert the public about SARS' risks, protective behavior, and access to emergency assistance for high-risk groups. All aspects of such campaigns, from preparation, testing, printing, and distribution of information, education, and communication materials; focus group dialogues and application of multimedia and informal/ distance learning methods will be eligible. Training of media and survey field staff, with attendant consultant requirements, will be eligible.

C. Analysis of Required Investment Response

5. This component will support the redesign of ongoing Asian Development Bank (ADB) projects and facilitate the development of future ADB projects for additional short- and medium-term responses to the SARS epidemic and other emerging contagions. The component could also support the development of (i) medium- and long-term action plans; (ii) procurement plans to meet long-term needs for communicable disease control; and (iii) strategies to meet the financing gap, using funds from ADB and others. This support will likely be through domestic and international consultancy and the organization and financing of workshops and seminars.

6. Support under each of these categories should complement, and not duplicate, other assistance being provided to fight SARS. The proposed technical assistance (TA) will focus primarily on the soft side of health system capacity building but will provide equipment where necessary and appropriate. ADB is defining a package of essential surveillance and infection control assistance program package with the World Health Organization (WHO). The TA may provide financing to purchase parts of the package, or to support related and complementary materials in coordination with other development partners and the efforts of the Governments of the member countries.

COST ESTIMATES AND FINANCING PLAN
(\$'000)

Item	Cost
Asian Development Bank Financing^a	
1. Consultants (including international and domestic travel)	700.0
2. Equipment and supplies ^b	400.0
3. Capacity Building and Workshops (Includes materials development, supplies, and travel).	200.0
4. Surveys, Assessment, and Monitoring	400.0
5. Contingencies	300.0
Total (A)	2,000.0

^a Financed by the Asian Development Bank technical assistance funding program

^b Includes personal protective equipment for trainees, including health workers and other personnel at risk; medical equipment necessary for trained health workers; laboratory equipment for public health surveillance, hospital, and quarantine/isolation units; and specialized software for epidemiological and economic analysis, special rapid surveys, and training

Source: Asian Development Bank estimates.