



Technical Assistance Report

Project Number: 47019
Regional—Capacity Development Technical Assistance (R-CDTA)
September 2014

South Asian Association for Regional Cooperation Food Security Through Control of Transboundary Animal Diseases (Financed by the Japan Fund for Poverty Reduction)

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Asian Development Bank

ABBREVIATIONS

ADB	–	Asian Development Bank
ASEAN	–	Association of Southeast Asian Nations
ECTAD	–	Emergency Centre for Transboundary Animal Diseases
EU	–	European Union
FAO	–	Food and Agriculture Organization of the United Nations
FMD	–	foot and mouth disease
HPAI	–	highly pathogenic avian influenza
HPED	–	highly pathogenic and emerging disease
JFPR	–	Japan Fund for Poverty Reduction
OIE	–	World Organization for Animal Health
PPR	–	pest des petits ruminants (goat plague)
RDL	–	regional diagnostic laboratory
RSU	–	regional support unit
SAARC	–	South Asian Association for Regional Cooperation
TA	–	technical assistance
TAD	–	transboundary animal disease
WHO	–	World Health Organization

NOTE

In this report, “\$” refers to US dollars.

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CAPACITY DEVELOPMENT TECHNICAL ASSISTANCE AT A GLANCE

1. Basic Data		Project Number: 47019-001	
Project Name	South Asian Association for Regional Cooperation Food Security through Control of Transboundary Animal Diseases	Department /Division	SARD/SAER
Country Borrower	REG Not Applicable	Executing Agency	Asian Development Bank
2. Sector		Financing (\$ million)	
✓ Agriculture, natural resources and rural development	Subsector(s) Livestock		2.00
		Total	2.00
3. Strategic Agenda		Climate Change Information	
Inclusive economic growth (IEG)	Pillar 2: Access to economic opportunities, including jobs, made more inclusive	Climate Change impact on the Project	Low
Regional integration (RCI)	Pillar 1: Cross-border infrastructure Pillar 2: Trade and investments		
4. Drivers of Change		Gender Equity and Mainstreaming	
Governance and capacity development (GCD)	Components Institutional development	No gender elements (NGE)	✓
Partnerships (PAR)	Implementation United Nations organization		
Private sector development (PSD)	Public sector goods and services essential for private sector development		
5. Poverty Targeting		Location Impact	
Project directly targets poverty	No	Not Applicable	
6. TA Category: B			
7. Safeguard Categorization Not Applicable			
8. Financing			
Modality and Sources		Amount (\$ million)	
ADB		0.00	
None		0.00	
Cofinancing		2.00	
Japan Fund for Poverty Reduction		2.00	
Counterpart		0.00	
None		0.00	
Total		2.00	
9. Effective Development Cooperation			
Use of country procurement systems		No	
Use of country public financial management systems		No	

I. INTRODUCTION

1. The South Asian Association for Regional Cooperation (SAARC) regional strategy and regional program for food security was drawn up in 2007–2008 with the assistance of the Food and Agriculture Organization of the United Nations (FAO).¹ This was adopted by the Fifteenth SAARC Summit in Colombo, Sri Lanka in August 2008. Under SAARC initiatives for regional food security, the Asian Development Bank (ADB) prepared seven food security project proposals for SAARC, assisted by technical assistance (TA) on Promoting South Asian Regional Economic Cooperation II.² SAARC requested ADB assistance in 2012 for a regional TA for implementing one of the seven project proposals, namely, the control of transboundary animal diseases (TADs).³ Following SAARC's request, a fact-finding mission visited Nepal from 21 to 26 July 2013 and agreed with SAARC on the TA impact, outcome, output, implementation arrangements, cost estimates, and terms of reference of the consulting services. The TA will focus on promoting sustainable regional cooperation among the SAARC member countries to address common issues related to TADs. The underpinning thrust is on improving biosecurity in the SAARC region; improving food security and safety in the SAARC region; and expanding local, regional, and international trade in livestock and livestock products. The design and monitoring framework is in Appendix 1.⁴

II. ISSUES

2. Despite recent rapid economic growth, about 571 million people or 36% of the population are poor in SAARC countries, making up 44% of the developing world's poor.⁵ Livestock accounts for 30% of the regional agricultural gross domestic product, and more than 60% of livestock are owned by smallholder farmers. The majority of rural poor in the region are dependent on livestock, which is an important source of protein, micronutrients, income, and often the only insurance against crop failure and major medical expenses. By 2020, the demand for livestock products within the region is projected to grow rapidly, requiring the region to provide an estimated additional 4 million tons of meat and 65 million tons of milk.⁶

3. This sharp increase in demand for livestock products, largely driven by high income growth and rapid urbanization, will potentially improve the livelihoods of smallholder farmers by commercializing livestock products. Meeting the growing livestock demand is a challenge because of the impending threats from TADs. Smallholders will have to produce healthy and productive animals to exploit these market opportunities. The outbreak of TADs in the region during 2007–2012 killed a large number of animals, threatening the livelihoods of poor people. The morbidity and mortality rates of livestock resulting from TADs are high, and the impact of these diseases on the incomes of poor households is not only felt locally and nationally but also within and outside the region.

4. TADs have threatened food security in the region through reducing the quantity and quality of food, serious loss of animal protein, and loss of draught animal power for cropping.

¹ The SAARC member countries are Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, and Sri Lanka.

² ADB. 2008. *Technical Assistance for Promoting South Asian Regional Economic Cooperation II*. Manila.

³ TADs are epidemic diseases that are highly contagious or transmissible and have the potential for very rapid spread, irrespective of national borders, causing serious socioeconomic and possibly public health consequences.

⁴ The TA first appeared in the business opportunities section of ADB's website on 31 July 2013.

⁵ On the basis of the percentage of people living on less than \$1.25 a day.

⁶ ADB. 2008. Institutionalization of SAARC Mechanisms for the Control of Transboundary Animal Diseases. Background paper prepared under Promoting South Asian Regional Economic Cooperation II.

Most of the agriculture production in the region is derived from a predominantly mixed crop–livestock farming system based on less than a hectare of land. All countries in the region are mainly dependent on the supply of animal protein from milk and meat, mainly derived from buffalo, cattle, sheep, goats, and poultry. Livestock contributes to food security and provides high-quality protein and micronutrients to help correct nutritional deficiencies caused by a predominantly vegetarian and cereal-based diet.

5. Significant trade, including huge informal trade in livestock and livestock products, is one of the major reasons for the spread of high impact TADs between the land-linked South Asia nations. These diseases cause devastating economic losses to farmers and the agriculture sector. TADs—such as highly pathogenic avian influenza (HPAI), foot and mouth disease (FMD), and pest des petits ruminants or goat plague (PPR)—are seriously impeding trade and market opportunities in livestock and livestock products in South Asia. TAD outbreaks cause huge morbidity and mortality in cattle, sheep, goats, and poultry, with significant disruption of trade in livestock, meat, and dairy products. These diseases seriously affect the livelihoods of smallholder livestock farmers, who represent 60% of the population in the region. In Bangladesh, the poultry industry is estimated to have lost \$550 million since 2007 as a result of HPAI outbreaks. Losses of livestock in India attributable to FMD are estimated at \$4.50 billion annually. The colossal losses resulting from TADs indicate inadequate capacity of public and private sector animal health management agencies at country and regional levels.

6. The relationship between animal infectious diseases and emerging human diseases is well established. In Asia, two significant zoonotic diseases have emerged in the past decade to cause serious epidemics in humans, i.e., Nipah virus disease and severe acute respiratory syndrome. HPAI and/or H5N1 have emerged as a major problem and persists in South Asian countries with varying incidence of outbreaks at national levels. From a global perspective, the continued presence of uncontrolled foci of HPAI in South Asia is a continued threat for the emergence of a pandemic strain of human influenza, as well as a source for introduction of the H5N1 virus to other countries, and a threat to livelihoods and food security for the poor in the region. Highly pathogenic and emerging diseases (HPEDs) are expected to increase, creating a constant threat in many parts of Asia.

7. SAARC countries face significant challenges in the implementation of animal health management strategies, especially in surveillance, reporting, zoning, contingency planning, and risk analysis. This is mainly because of inadequate regional and national capacity and awareness. Improvement in these areas would contribute to improved biosecurity within the food-based industries of SAARC countries—augmenting productivity and market access. Given the transboundary nature of the diseases, a strong coordination mechanism is needed to foster and mobilize subregional cooperation in controlling TADs. Such mechanisms have been established in other subregions, such as the Association of Southeast Asian Nations (ASEAN), and are highly effective in dealing with TADs. The world is now free from rinderpest, largely because of the Global Rinderpest Eradication Programme. Global experience shows that combating TADs requires regional initiatives rather than independent actions by each country. No single country will be able to control these high-impact transboundary diseases effectively through isolated efforts. SAARC countries, via a series of consultations, agreed to tackle the TADs through a regional coordination mechanism under the umbrella of the Global Framework for the Progressive Control of Transboundary Animal Diseases. This joint FAO–World

Organization for Animal Health (OIE) initiative on global control of TADs is conducted in cooperation with the World Health Organization (WHO).⁷

8. SAARC undertook regional initiatives in 2010 through the regional cooperation program on HPEDs funded by the European Union (EU). FAO has been supporting SAARC to implement regional cooperation program on HPEDs. Under this project, a regional support unit (RSU) and a regional epidemiology center have been established in Kathmandu, Nepal. Leading regional diagnostic laboratories (RDLs) have been strengthened in Bangladesh (for PPR), India (for FMD), and Pakistan (for HPAI). The institutional structure developed under the EU funding needs to be strengthened and sustained with TA for the next 2 years before SAARC takes it over formally. Despite developing an institutional structure, SAARC's TAD control activities are not fully functional because of limited technical capacity and organizational weaknesses. The regional framework for combating TADs is weak, and regional strategies and guidelines are not fully harmonized. The RSU and RDLs need to be strengthened with specialist support and technical expertise to combat TADs effectively. Regional and national animal health information and surveillance need to be upgraded. Animal management agencies in the public and private sector need to be better equipped to provide specialist assistance in controlling TADs. SAARC's TAD initiatives still lag behind well-established regional TAD activities such as ASEAN program, which has achieved significant progress in combating TADs—particularly on HPAI, FMD, and classical swine fever. In ASEAN, national animal health capability has been expanded, with greater regional coordination on TADs, focusing on controlling the diseases at source with multisectoral cooperation; and expanding partnership arrangements and cooperation.

III. THE PROPOSED TECHNICAL ASSISTANCE

A. Impact and Outcome

9. The impact of the TA will be improved control of the priority TADs in affected zones of SAARC countries. The impact indicators are (i) the morbidity rate for livestock decreased from 50% in 2012 to 30% by 2018 in affected zones; and (ii) the mortality rate of livestock decreased from 70% in 2012 to 35% by 2018 in affected zones. The outcome of the TA will be improved compliance with international sanitary and phytosanitary standards in the SAARC region. The outcome indicator is compliance with international sanitary and phytosanitary standards improved from 30% in 2012 to 50% by 2016 in affected zones.

B. Methodology and Key Activities

10. The TA aims at fostering regional cooperation among SAARC countries, improving food security in the region, and facilitating regional and international trade in livestock and livestock products. It will focus on innovative and new knowledge and/or approaches under the umbrella of the Global Framework for the Progressive Control of Transboundary Animal Diseases (para. 7). About 30 seminars, workshops and training programs will be organized to improve the capacity of the animal health management agencies and stakeholders to control TADs.

11. The TA will build on existing activities within the SAARC region funded through the EU regional cooperation program on HPEDs. It will integrate these activities to underpin three priority diseases that limit trade in livestock and its products: FMD, PPR, and HPAI. Since many TADs can also cause severe disease and death in humans, SAARC through the RSU will use

⁷ World Organization for Animal Health. The Global Framework for the Progressive Control of Transboundary Animal Diseases. http://www.oie.int/fileadmin/Home/eng/About_us/docs/pdf/GF-TADs_approved_version24May2004.pdf.

the One Health approach to ensure a multidisciplinary approach to address these high-impact diseases, involving both the animal and human health sectors.⁸ The TA will support four outputs as follows:

- (i) **Output 1: Established framework for improved regional cooperation among South Asian Association for Regional Cooperation countries in combating transboundary animal diseases.** The TA will support the establishment of a framework for a sustainable and improved regional cooperation mechanism on animal health management for SAARC. It will also focus on harmonizing strategies and guidelines on animal health management and disease control among SAARC countries. To ensure the long-term sustainability of TAD control initiatives, SAARC is expected to endorse the framework and harmonized strategies and guidelines by the end of the TA.
- (ii) **Output 2: Regional structures in the fight against transboundary animal diseases operational.** The TA will support the RSU with specialist assistance to make it fully operational, improving capacity in combating TADs. RDLs will be strengthened with specialist support and technical expertise. By 2016, over 30% of the RSU will be supported by the member states, and two out of the three designated leading laboratories in the region will be self-funded. With SAARC's increasing ownership of the regional mechanism, the member countries are expected to contribute financially to the regional coordination mechanism by mid-2016. The TA will also focus on improving disease control, based on local problem analysis in each country.
- (iii) **Output 3: Expanded regional and national animal health information and surveillance system.** The TA will support the establishment of a regional epidemiology center animal health information system, issuing regular reports on regional and national animal health information, publishing a bimonthly bulletin, (occurring every 2 months) and updating the web-based reporting system. It will also focus on mapping regional and national animal movements; preparing optimal TAD control options for poor smallholder farmers; and developing regional and national reporting systems, and a surveillance plan.
- (iv) **Output 4: Improved institutional capacity of public and private sector animal health management agencies.** The TA will develop improved animal health delivery mechanisms; improve stakeholders' capacity in policy development in international animal health procedures and regulations; and expand technical expertise in epidemiology, disease diagnosis, surveillance, reporting, outbreak investigation, and laboratory operations.

C. Cost and Financing

12. The TA is estimated to cost \$2,000,000, which will be financed on a grant basis by the Japan Fund for Poverty Reduction (JFPR) and administered by ADB .

⁸ One health approach recognizes that the health of humans, animals, and ecosystems are interconnected.

D. Implementation Arrangements

13. TA implementation is expected to commence in October 2014 and continue up to September 2016 (24 months). SAARC will be the implementing agency, through the ministries of agriculture and/or livestock of SAARC member states. ADB will be the executing agency. Engagement of consulting services will follow ADB's Guidelines on the Use of Consultants (2013, as amended from time to time).

14. The FAO will be selected by ADB through single-source selection to implement the TA and deliver the required services.⁹ The FAO has the necessary expertise at global, regional, and national levels to provide technical and operational services to deliver TA activities. The FAO is the only institution qualified, with technical expertise and experience for the assignment. The FAO plays an important role in managing and coordinating development partner inputs to TAD control programs at country and regional levels. It has also been working closely with both ASEAN and SAARC in the development of regional activities for HPAI control.

15. The FAO structure in the region provides a comparative advantage for detailed technical project implementation, with a well-established Regional Office for Asia and the Pacific in Bangkok. Its Emergency Centre for Transboundary Animal Diseases (ECTAD) can provide full technical and administrative support. The FAO representative office in each SAARC member country provides an efficient high-level link to national animal health authorities. The FAO has a significant team of technical and operational personnel in the field, and this TA can be complemented by their activities. Single-source selection is justified, as the envisaged TA tasks represent continuity of the ongoing EU-funded regional cooperation program on HPEDs being implemented by the FAO.

16. The FAO will propose a team comprising 144 person-months of international and 48 person-months of national consulting services to deliver TA activities. All procurement will follow ADB's Procurement Guidelines (2013, as amended from time to time). The FAO will be paid on a time-based contract basis. The RSU in Kathmandu, Nepal will implement the project activities. A project steering committee—composed of the SAARC Secretariat, experts representing each of the participating countries, the FAO, and ADB—will be established to provide (i) overall strategic and policy directions, (ii) guidance and oversight, and (iii) implementation guidelines to the project and RSU. The FAO will (i) ensure transparency and accountability; (ii) facilitate administrative procedures; and (iii) provide legal assistance, where applicable. All disbursements under the TA will be made in accordance with the *Technical Assistance Disbursement Handbook* (2010, as amended from time to time). The equipment procured under the TA will be turned over to the SAARC Secretariat upon TA completion.

IV. THE PRESIDENT'S RECOMMENDATION

17. The President recommends that the Board approve ADB administering technical assistance not exceeding the equivalent of \$2,000,000 to be financed on a grant basis by the Japan Fund for Poverty Reduction for the South Asian Association for Regional Cooperation Food Security Through Control of Transboundary Animal Diseases.

⁹ Arrangements with FAO will comply with the ADB–FAO 1981 Memorandum of Understanding.

DESIGN AND MONITORING FRAMEWORK

Design Summary	Performance Targets and Indicators with Baselines	Data Sources and Reporting Mechanisms	Assumptions and Risks
<p>Impact Improved control of the priority TADs in affected zones of SAARC countries</p>	<p>By 2018: Morbidity rate for livestock decreased from 50% in 2012 to 30%</p> <p>Mortality rate of livestock decreased from 70% in 2012 to 35%</p>	<p>FAO, OIE, WHO, and European Commission data and reports</p>	<p>Assumptions SAARC and member countries remain committed to TAD control</p> <p>No new disease of high impact emerges during the project period</p>
<p>Outcome Improved compliance with international sanitary and phytosanitary standards in the SAARC region</p>	<p>By 2016: Compliance with international sanitary and phytosanitary standards improved from 30% in 2012 to 50% in affected zones</p>	<p>FAO, OIE, and WHO regional joint reports on diseases</p>	<p>Risk Natural disasters and price shocks for livestock and livestock products significantly affect livestock development</p>
<p>Outputs</p> <p>1. Established framework for improved regional cooperation among SAARC countries in combating TADs</p> <p>2. Regional structures in the fight against TADs operational</p> <p>3. Expanded regional and national animal health information and surveillance system</p>	<p>By 2016: A framework for a sustainable and improved regional coordination mechanism and cooperation on animal health management endorsed by SAARC</p> <p>Harmonized strategies and guidelines on animal health management and disease control endorsed by SAARC for implementation by their respective governments</p> <p>RSU for TAD control fully operational and partially self-funding, with over 30% of staff supported on secondment from the countries in the region</p> <p>Three RDLs designated regional leading laboratories are fully operational, and at least two out of the three laboratories are self-funded</p> <p>REC animal health information system established and functional</p> <p>Regional and national animal movements mapped and key value chains determined</p>	<p>For all Output 1 indicators: SAARC-signed document</p> <p>For all Output 2 and Output 3 indicators: RSU quarterly reports and newsletters, and project website</p>	<p>Assumption Qualified and experienced animal health management specialists are available</p>

Design Summary	Performance Targets and Indicators with Baselines	Data Sources and Reporting Mechanisms	Assumptions and Risks
<p>4. Improved institutional capacity of public and private sector animal health management agencies</p>	<p>Guidelines for optimal TAD control for smallholder farmers prepared</p> <p>Regional and national reporting systems, surveillance plan, and an early warning network endorsed by SAARC</p> <p>40 specialists trained in policy development in international animal health procedures and regulations</p> <p>200 technical experts from veterinary departments certified in epidemiology, disease diagnosis, surveillance, reporting, outbreak investigation, and laboratory operations</p>	<p>RSU quarterly reports and newsletters, and project website</p> <p>SAARC-signed document</p>	
<p>Activities with Milestones</p> <p>1. Established framework for improved regional cooperation among SAARC countries in combating transboundary animal diseases</p> <p>1.1 Identify and facilitate mechanisms for long-term sustainability of framework (Q4 2014)</p> <p>1.2 Evaluate institutional structures to enhance the impact of optimal animal disease control technologies and strategies for poor livestock producers (Q4 2014)</p> <p>1.3 Organize regular meetings of national chief veterinary officers, heads of epidemiological units, etc. (Q4 2014–Q2 2016)</p> <p>1.4 Organize annual meetings of regional and national animal and human health experts (Q4 2014–Q2 2016)</p> <p>1.5 Identify regulations, policies, and strategies to support smallholder farmers' access to markets (Q4 2015)</p> <p>1.6 Evaluate social welfare benefits of policy and technology options, and assess trade-offs (Q4 2014)</p> <p>2. Regional structures in the fight against transboundary animal diseases operational</p> <p>2.1 Develop long-term plan for dissemination and promotion of RSU, REC, and RDL outputs (Q2 2015)</p> <p>2.2 Leverage other sources of funding for the long-term delivery of RSU, REC, and RDL outputs (Q4 2014)</p> <p>2.3 Assess administrative and financial sustainability of RSU, REC, and RDLs; and recommend measures for sustainability (Q4 2014)</p> <p>3. Expanded regional and national animal health information and surveillance system</p> <p>3.1 Support REC and enhanced intercountry information sharing (Q3 2014–Q2 2016)</p> <p>3.2 Prepare national epidemiological studies and national disease survey plans (Q4 2014)</p> <p>3.3 Characterize viral strains, disease prevalence, and vaccine strains for overall TAD control program (Q1 2015)</p> <p>3.4 Map animal movements and main drivers of movement (Q3 2015)</p>			<p>Inputs</p> <p>Japan Fund for Poverty Reduction: \$2 million</p>

<p>3.5 Develop optimal TAD control options to benefit poor livestock farmers (Q3 2015)</p> <p>3.6 Develop regional TAD reporting system and surveillance plans and early warning network (Q1 2015)</p> <p>3.7 Assess border control mechanisms (Q2 2015)</p> <p>3.8 Support the continued publication of bimonthly (occurring every 2 months) bulletin and operation of website and web-based animal health reporting system (Q3 2014–Q2 2016)</p> <p>4. Improved institutional capacity of public and private sector animal health management agencies</p> <p>4.1 Evaluate veterinary services delivery mechanism and their effectiveness in reaching the poor (Q4 2014)</p> <p>4.2 Develop national capacity strengthening and training plans (Q4 2014)</p> <p>4.3 Conduct training and capacity development program (Q1 2015–Q2 2016)</p> <p>4.4 Develop capacity to deploy emergency animal health missions (Q3 2014–Q2 2016)</p> <p>4.5 Develop frameworks for market assessment and capacity building in international animal health regulations (Q4 2014)</p>	
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FAO = Food and Agriculture Organization of the United Nations, OIE = World Organization for Animal Health, Q = quarter, RDL = regional diagnostic laboratory, REC = regional epidemiology center, RSU = regional support unit, SAARC = South Asian Association for Regional Cooperation, TAD = transboundary animal disease, WHO = World Health Organization.

Source: Asian Development Bank.

COST ESTIMATES AND FINANCING PLAN
(\$'000)

Item	Amount
Japan Fund for Poverty Reduction^a	
1. Consultants	
a. Remuneration and per diem	
i. International consultants	1,254.0
ii. National consultants	44.4
b. International and local travel	132.0
c. Reports and communications	45.0
2. Equipment ^b	40.0
3. Workshops, training, seminars, and conferences ^c	90.0
4. Miscellaneous administration and support costs	302.1
5. Contingencies	92.5
Total	2,000.0

^a Administered by the Asian Development Bank.

^b Seven office equipment items (laptops, printers, office supplies, etc.); and three laboratory equipment items.

^c Thirty workshops, seminars, training and/or conferences will be organized.

Source: Asian Development Bank estimates.

OUTLINE TERMS OF REFERENCE FOR CONSULTANTS

A. International Consultants

1. **Regional support unit coordinator** (24 person-months). The coordinator will manage the technical assistance (TA) team in Kathmandu, and coordinate the highly pathogenic avian influenza (HPAI) and other transboundary animal disease (TAD) regional programs for South Asian Association for Regional Cooperation (SAARC) countries. In particular, the coordinator will:

- (i) lead the subregional Emergency Centre for Transboundary Animal Diseases (ECTAD) unit and the regional support unit, and coordinate and participate in monitoring the activities of the Food and Agriculture Organization of the United Nations (FAO) and outputs related to avian influenza and other transboundary animal diseases in the subregion;
- (ii) assist in liaising with the SAARC Secretariat on avian influenza and transboundary disease control program activities, including implementation of the European Union-funded project for strengthening capacity in eight SAARC member countries;
- (iii) manage and coordinate the epidemiology and diagnostic laboratory networks related to TADs and highly pathogenic and emerging infectious diseases (HPEDs) in SAARC countries;
- (iv) promote, coordinate, and facilitate subregional policies and technical activities to control TADs and HPEDs, according to the concepts and principles of the Global Framework for the Progressive Control of Transboundary Animal Diseases;
- (v) review and update preparedness plans in response to various TADs and HPEDs in conjunction with the World Health Organization (WHO) and other related organizations, taking into account animal–human health and ecosystem interface in SAARC countries; and
- (vi) monitor closely the progress of coordination mechanisms being put into place within the United Nations (UN) system to address the avian influenza threat, and liaise regularly with other UN and international agencies to ensure timely and relevant participation of the FAO in the process.

2. The RSU coordinator will have a postgraduate degree in an animal health discipline; and will be an internationally recognized, experienced veterinarian with demonstrated broad expertise in the control and prevention of animal diseases, especially those of epidemic significance, with competence and practical experience of disease emergency preparedness planning, disease surveillance, and control management. With at least 10 years of relevant experience in animal disease emergency preparedness in the region, the coordinator should have good communication skills in English (written and spoken). The location of the assignment will be in Kathmandu, Nepal.

3. **Regional support unit assistant coordinator** (24 person-months). The assistant coordinator will perform the following:

- (i) under the direct supervision of the RSU coordinator, be directly responsible for the day-to-day activities of the RSU;
- (ii) assist the RSU coordinator in his or her duties;
- (iii) ensure harmonization of project activities with other national and regional TAD and One Health projects;

- (iv) collaborate with government staff of the SAARC member countries in undertaking field activities;
- (v) ensure smooth implementation of the program at subregional and country levels, including establishing the subregional laboratory and surveillance networks, liaising with institutions for a letter of agreement, assuring timely provision of inputs, and liaising with concerned persons at central and provincial levels; and
- (vi) facilitate collaboration between international consultants and authorities at all levels—central, provincial, municipal, and village.

4. The RSU assistant coordinator will, preferably, be a veterinarian with a postgraduate degree in an animal health discipline. The assistant coordinator must have at least 7 years of relevant disease control experience at the national or regional levels, with a good understanding of the livestock industry in the region, preferably to include the large and medium-scale producers as well as smallholder substance producers. The assistant coordinator will have good communication skills in English (written and spoken). The location of the assignment will be in Kathmandu, Nepal.

5. **Program officer** (24 months). The officer will perform the following:

- (i) handle day-to-day country and regional emergency and rehabilitation operations for the TAD and/or HPED program, including procurement, recruitment, and budgetary management and/or monitoring of the approved field expenditures;
- (ii) assist the RSU coordinator in supervising the technical, administrative, and operational personnel;
- (iii) liaise with the technical personnel in the FAO technical units to ensure the technical quality of activities;
- (iv) monitor expenditures and check against project work plans and budgets; and
- (v) ensure compliance with Asian Development Bank (ADB) and FAO regulations.

6. The officer should have an advanced university degree in agronomy, economics, natural sciences, or other related field, with at least 5 years of relevant experience in the agricultural and rural development sectors, including project and/or program management experience in developing countries and emergency operations. The location of the assignment will be in Kathmandu, Nepal.

7. **Regional epidemiology center coordinator** (24 person-months). The coordinator will perform the following:

- (i) under the direct supervision of the RSU coordinator, be directly responsible for the day-to-day activities of the center;
- (ii) review and update the work plan to cover project activities and ensure its successful implementation;
- (iii) establish and coordinate regional networks on epidemiology and surveillance, engaging national partners from all the member countries;
- (iv) map existing laboratories, evaluate the capacities of the key national laboratories, and develop a plan to upgrade them; and
- (v) evaluate the system for outbreak investigations and develop standardized regional outbreak investigation protocols that can be acceptable to all member countries.

8. The consultant must be a veterinarian with a postgraduate degree in epidemiology and/or microbiology, with extensive experience in coordinating animal health programs. The

consultant should have a minimum 7 years of experience in development and emergency projects in the sector, including extensive experience in project management; knowledge of the region's institutional environment; and the ability to operate in complex institutional environments. The consultant should have good English communication skills (written and spoken). The location of the assignment will be in Kathmandu, Nepal.

9. **Regional support unit animal health officer** (24 person-months). Under the supervision of the subregional manager of the ECTAD unit (SAARC) and the RSU coordinator, the consultant will perform the following activities:

- (i) participate in activities on TADs and HPEDs;
- (ii) be familiar with the various regional and international tools and platforms supporting control of TADs and HPEDs on a regional basis;
- (iii) support the FAO RSU coordinator in ensuring coordination with the SAARC Secretariat on HPED and TAD control program activities for strengthening capacity in SAARC countries;
- (iv) engage ministries in member countries to promote inter-sectoral regional coordination on key aspects of HPED and TAD prevention and control; and
- (v) perform other related duties as required.

10. The officer will be a veterinary graduate from a recognized university, ideally with a postgraduate degree, preferably in epidemiology. The officer will have demonstrated broad expertise in the control and prevention of animal diseases, especially those of epidemic significance. The officer will have at least 5 years of relevant experience in animal disease emergency preparedness, surveillance, control, and management at the national and regional level, with good communication skills in English (written and spoken). The location of the assignment will be in Kathmandu, Nepal.

11. **Disease information data expert** (24 person-months). Under the direct supervision of the REC coordinator, the expert will be directly responsible for the day-to-day activities of the REC:

- (i) train central and field staff on the use of the TAD information data management software for animal disease data collection and analysis;
- (ii) facilitate Geographic Information System (GIS) data management and disease mapping in the region, and conduct GIS training;
- (iii) assist in developing the national and regional animal disease information and reporting systems;
- (iv) produce bimonthly (occurring every 2 months) information bulletins;
- (v) in collaboration with technical staff in REC and national counterparts, assist in configuring the Java version of information on TADs with administrative layers in member countries, and assist in its installation at the central level; and
- (vi) develop a program for surveillance and laboratory data analysis, including a statistical program.

12. The expert will be a graduate from a recognized university, ideally with a postgraduate degree, preferably in epidemiology or veterinary science, with a strong background in data and statistical analysis. The expert will have a minimum of 5 years of experience handling data related to epidemiology and TADs, with understanding of the SAARC region and FAO systems, and excellent communication skills.

B. National Consultants

13. **Website manager** (24 person-months). Under the direct supervision of the RSU coordinator, the website manager will be responsible for the following specific tasks and deliverables on a daily basis:

- (i) design and manage technical functions related to the project website, including building, updating, and linking all website pages in English, to make the sites more user-friendly and easily accessible;
- (ii) conceptualize and design the website layout, graphics, logos, and banners;
- (iii) manipulate a wide variety of audio and visual media, and prepare it for use on the project website;
- (iv) identify existing material in publications and use it to produce animated interfaces to display a wide variety of information; illustrate and produce educational animations; and
- (v) implement and maintain technical requirements of web systems: server infrastructure, HTML markup, URL structure, and coding of web applications.

14. The manager will have a bachelor's degree in information technology, good command of the English language, computer science, visual communication, graphic design, or a related discipline. The manager should have 3–4 years of progressive work experience in website and web application development; must have theoretical and practical knowledge of HTML, DHTML, CSS, JavaScript, ASP.NET, VB.NET, SQL Server, A Photoshop, Macromedia Flash, and knowledge of other graphics applications; and a solid knowledge base in advanced internet technologies and object-oriented programming. The location of the assignment will be in Kathmandu, Nepal.

15. **Operations and finance officer** (24 person-months). Under the general supervision of the ECTAD and/or RSU coordinator, with direct supervision of the international operations officer, the officer will perform the following duties:

- (i) assist with day-to-day operations on matters relating to the RSU and/or ECTAD unit;
- (ii) for the projects under ECTAD and the RSU, monitor the project budget in terms of expenditures and commitments in accordance with the project budget and work plan, and assist in reconciling the financial report between the shadow budget and the FAO corporate system data;
- (iii) examine project payment requests and documentation to ensure compliance with administrative and financial rules and/or procedures; scrutinize all relevant documents against each reimbursement; provide clearance to the operations officer as to the eligibility of payment; and prepare corresponding disbursement vouchers and spreadsheet;
- (iv) maintain petty cash and/or operational cash advances, keep electronic and paper filing of relevant administrative and financial information, maintain all relevant correspondence, and archive relevant information and data;
- (v) assist in preparing project progress and financial reports; process project payments in accordance with the authorized budget limits; and
- (vi) assist in the implementation of administrative transactions in line with the organization's rules and regulations (including the issuance of field budget authorizations, field disbursement authorizations, purchase requisitions, field purchase orders, and local purchase orders).

16. The officer will be a university graduate, preferably in finance, accounting, business administration, or a related field; with training in business administration and/or accountancy and/or finance qualifications, with computer literacy, and 3 years of practical experience in general accounting and progressively responsible experience in administrative and/or accounting work. The officer will be assigned to Kathmandu, Nepal.