

Chapter 2

The FAO One Health portfolio

Since the HPAI expansion began in Asia in late 2003, FAO has been playing a key role in the global response to the prevention and control of HPAI and is now repositioning itself as a main driving force in the broader field of prevention, detection, control and response to other high impact emerging and re-emerging infectious diseases. The following chapter provides a summary of the FAO One Health portfolio as of December 2011 and the FAO One Health AP funding requirements²² (as of January 2012 to support 2012–2013 activities).

OVERVIEW OF EMERGENCY CENTRE FOR TRANSBOUNDARY ANIMAL DISEASES (ECTAD) PORTFOLIO

FAO commenced its HPAI global response in 2004, initially in Asia.²³ However, with the rapid spread of HPAI to other parts of Asia, Africa, and Central and Eastern Europe, FAO and OIE came together and developed the joint *FAO/OIE Global Strategy for the Progressive Control of H5N1 HPAI in 2005*, which was revised in 2007. To implement the strategy, FAO developed a global programme²⁴ to address the required immediate and short-term interventions, while improving capacities for longer-term sustainable approaches to eliminate H5N1 HPAI from poultry. The global programme was implemented by FAO's ECTAD established in 2004. In addition to 165²⁵ donor-funded HPAI projects, the ECTAD programme portfolio also includes 48 projects related to other TADs (see Table 2.1). Of the 165 HPAI projects, 21 projects were still active at the end of December 2011, 60 percent of which are in Asia. Out of the 48 TAD projects, 20 projects were active at the end of December 2011, addressing key TADs (ASF, anthrax, brucellosis, rabies, Rift Valley fever [RVF], rinderpest, PPR, and Ebola-Reston virus [ERV]²⁶), with 35 percent of those in the Asia region.

HPAI remains a high priority. FAO's eight-year collaborative HPAI global programme has contributed significantly to limiting the impact of the disease, establishing stronger national systems and strengthening regional coordination for disease preparedness, prevention and control. While sustained coordinated action has progressively reduced the number of

²² For more information see <http://www.fao.org/docrep/meeting/021/ma145e.pdf>

²³ *FAO recommendations on the prevention, control and eradication of highly pathogenic avian influenza (HPAI) in Asia* (available at <http://www.fao.org/docs/eims/upload/246982/aj126e00.pdf>).

²⁴ Global Programme for the Prevention and Control of H5N1 Highly Pathogenic Avian Influenza, 2006–2008. FAO regularly updates this programme based on knowledge advancements in science, socio-economics and policy (2008 version is available at <ftp://ftp.fao.org/docrep/fao/010/ai380e/ai380e00.pdf>).

²⁵ The total number of HPAI projects has decreased since the release of the last global report. This decrease occurred as a result of the project mapping exercise that focused on revising the thematic scopes of projects and tagging these against either HPAI or TADs. Consequently, three of the former HPAI projects were reclassified as TAD projects.

²⁶ There were also a number of projects on pandemic (H1N1) following the 2009 outbreaks.

TABLE 2.1
Overview of the ECTAD One Health portfolio

FAO ECTAD portfolio as of December 2011	HPAI	Other TADs
<i>Total active projects</i>	21	20
Asia	17	6
Central Asia	0	2
Global	2	1
Interregional	2	6
Africa	0	4
MENA	0	1
Latin America	0	0
Total closed projects	144	28
Total projects	165	48
Total budget (2004-2011) in US\$	322 274 745	73 749 833

countries affected by HPAI there is still a need to address the elements that inhibit progress towards disease control, prevention and elimination in the poultry sector in endemically infected countries and regions. While a large amount of disease work will remain prioritized on addressing HPAI in endemic countries, many other high impact zoonotic and TADs need to be addressed, too. The current ECTAD project portfolio reflects today's global need for a balanced combination of TAD and HPAI projects.

FUNDING STATUS

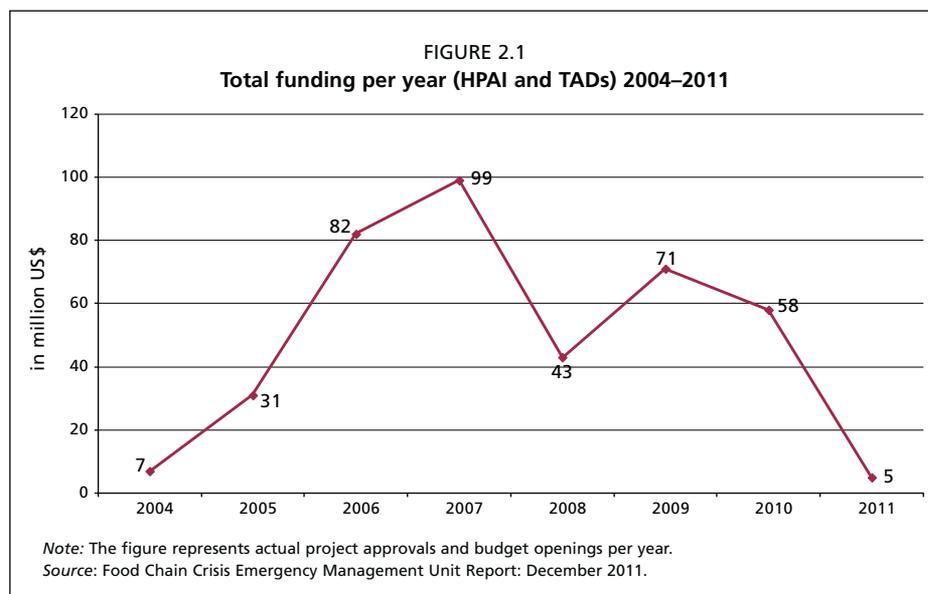
During the period 2004 to 2011, FAO and its partners have mobilized a total of US\$396 million towards HPAI and TAD projects (see Figure 2.1). Of this grand total, a little over US\$322 million were mobilized towards HPAI projects in over 95²⁷ countries for H5N1 HPAI preparedness, prevention and control. The FAO HPAI global programme funding peaked in 2007 after which it has been on a declining trend, both in terms of new projects and donor funding. During the same period, just under US\$74 million were mobilized toward TAD projects in 61²⁸ countries. The TAD funding reached its highest levels in 2009²⁹ (US\$26.53 million), to then dropped by more than 50 percent (US\$10.99) by 2011.

The trend in HPAI and TAD funding was due, in part, to the broader contextual changes taking place in the thinking within the international animal health and donor community on the need to move away from disease-specific interventions to a more holistic and integrated approach to building sustainable animal health systems at country, regional and global levels. FAO has been working along this approach, and in 2009 published

²⁷ These include countries that are direct recipients of funding and countries that are beneficiaries of global and interregional projects.

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²⁹ The pandemic (H1N1) outbreaks worldwide during 2009 led to further recognition of the need to build strategically on lessons learned from the responses to H5N1 HPAI and to apply them to other TADs and EIDs.



*Highly pathogenic avian influenza and beyond: FAO's response – towards one world, One Health.*³⁰ Furthermore, FAO developed a strategic AP (2011–2015)³¹ entitled, Sustainable animal health and contained animal-related human health risks – in support of the emerging One-Health agenda which was endorsed by FAO's programme committee in March 2011 and now constitutes the overall programmatic umbrella for the ECTAD work.

As a result, the current ECTAD project portfolio presents a balanced combination of TAD and HPAI projects, each constituting approximately 50 percent of the overall animal health programme.

DONORS

The HPAI global programme is financed by a total of 35 donors, of which 24 are government contributors, and the remaining 11 donors are mostly multilateral organizations.

The United States of America is the largest donor, contributing almost 50 percent (49.6 percent) of the total FAO HPAI global programme portfolio, with a total budget of US\$159.92 million as of December 2011. The United States of America is followed by Sweden (US\$23.66 million), Australia (US\$16.38 million), the European Union (US\$14.15 million) and Japan (US\$13.65 million). Table 2.2 provides details of all donors funding the HPAI portfolio and their contributions.

By comparison, the ECTAD TAD portfolio is supported by 12 donors equally distributed between multilateral organizations and governments. The United States of America is the largest donor contributing US\$26.2 million (more than a third at 36 percent) of the overall portfolio, followed by the European Union (US\$22.2 million). The Table 2.3 provides details of donor contributions to the TAD portfolio.

³⁰ Available at http://www.fao.org/ag/againfo/resources/en/publications/agapubs/HPAI_and_beyond.pdf

³¹ Available at <http://www.fao.org/docrep/meeting/021/ma145e.pdf>

TABLE 2.2

Total budget per donor in the HPAI portfolio as of December 2011

	Donor	Funding (million US\$)
1	ADB	11.14
2	AU-IBAR	0.24
3	Australia	16.38
4	Bangladesh	1.08
5	Belgium	2.83
6	Canada	9.92
7	Common Humanitarian Fund (CHF) Sudan	0.30
8	China	0.50
9	European Union ¹	14.15
10	FAO	9.65
11	France	6.74
12	Germany	9.53
13	Greece	0.19
14	ILRI	0.26
15	Ireland	0.32
16	Italy	0.28
17	Japan	13.65
18	Jordan	0.05
19	Nepal	2.39
20	The Netherlands	0.63
21	New Zealand	0.34
22	Norway	3.70
23	UNAMA	0.03
24	Organization of the Petroleum Exporting Countries (OPEC) Fund	0.70
25	Saudi Arabia	1.00
26	Spain	1.68
27	Sweden	23.66
28	Switzerland	3.70
29	UNDGO	0.93
30	United Nations Development Programme (UNDP)	0.77
31	The United Kingdom of Great Britain and Northern Ireland	10.24
32	The United States of America	159.92
33	UNJ	5.01
34	Viet Nam	1.05
35	WB	9.31
	Total	322.27

¹ This funding does not include funding for FAO's activities under The European Commission for the Control of Foot-and-Mouth Disease (EUFMD). (For more information on EUFMD see <http://www.fao.org/ag/againfo/commissions/eufmd/en/>).

TABLE 2.3
Budget per donor in the TAD portfolio as of December 2011

	Donor	Funding (Million USD)
1	African Development Bank	0.66
2	Australia	2.52
3	European Union	22.22
4	FAO	5.91
5	The Republic of Korea	2.61
6	Netherlands	1.25
7	CRDF	0.60
8	Spain	1.70
9	Sweden	1.83
10	The United States of America	26.91
11	UNDP Administered Donor Joint Trust Fund (UNJ)	5.77
12	UNOCHA	1.77
	Total	73.75

GEOGRAPHIC PRIORITIES

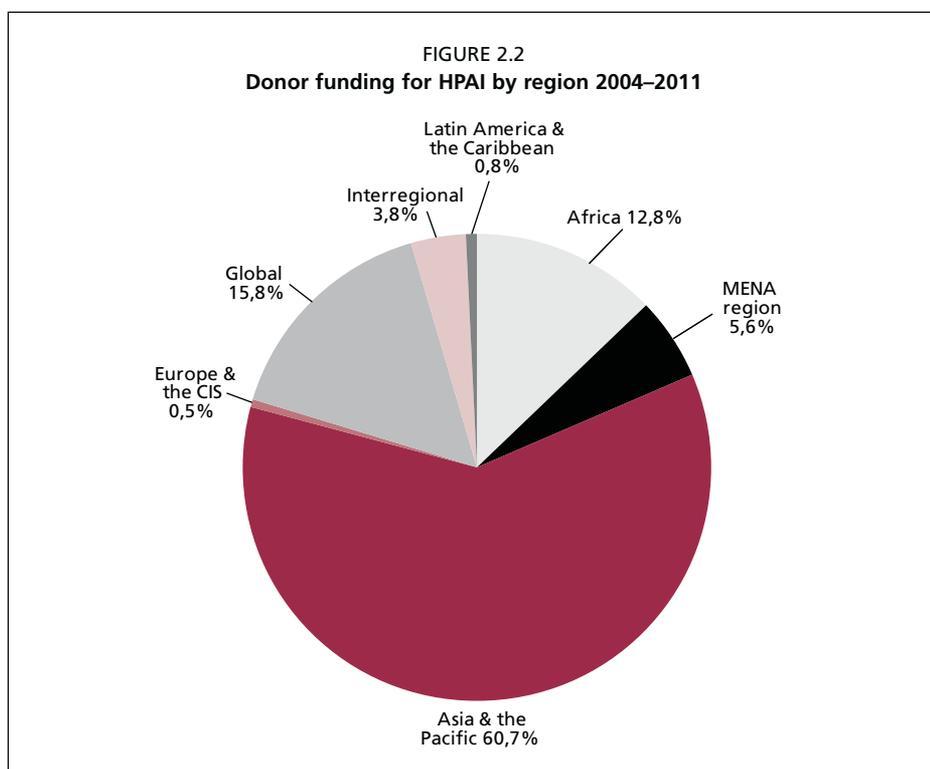
The HPAI/TAD funding has been mobilized for a range of operational and technical activities, particularly for developing and strengthening of veterinary structures, early warning, efficient detection and rapid response, in various geographic areas. The overall number of reported outbreaks/cases of H5N1 HPAI worldwide increased in 2011 compared to the same period in 2010, partly due to reporting from previously infected countries particularly associated with wild bird events. There was a general decrease in outbreak numbers at the country level during 2011, with the exception of Japan, the Republic of Korea and Bangladesh where increases were observed (see Chapter 1, Table 1.1). In Bangladesh, incidence appears to have increased considerably during 2011, where a five-fold increase in outbreak numbers was observed. The disease remains entrenched in several parts of Asia; consequently, Asia receives the most donor funding (see Figure 2.2).

The Asian region as a whole received US\$195.5 million during the period 2004–2011, accounting for 60.7 percent of total HPAI donor funding for implementation of national and regional projects.

Global activities³² constitute 15.8 percent (US\$50.8 million) of the total donor funding on HPAI, followed by the African region, which received 12.8 percent (US\$41.3 million) of HPAI funding for implementation of national and regional projects.³³ The Middle East and

³² Global projects are projects that cover a global geographical area.

³³ These figures reflect an overall US\$8.8 million decrease in funding for Africa since the Fourth Report January to December 2010: Global Programme for the Prevention and Control of Highly Pathogenic Avian Influenza available at <http://www.fao.org/docrep/014/i2252e/i2252e00.pdf>.

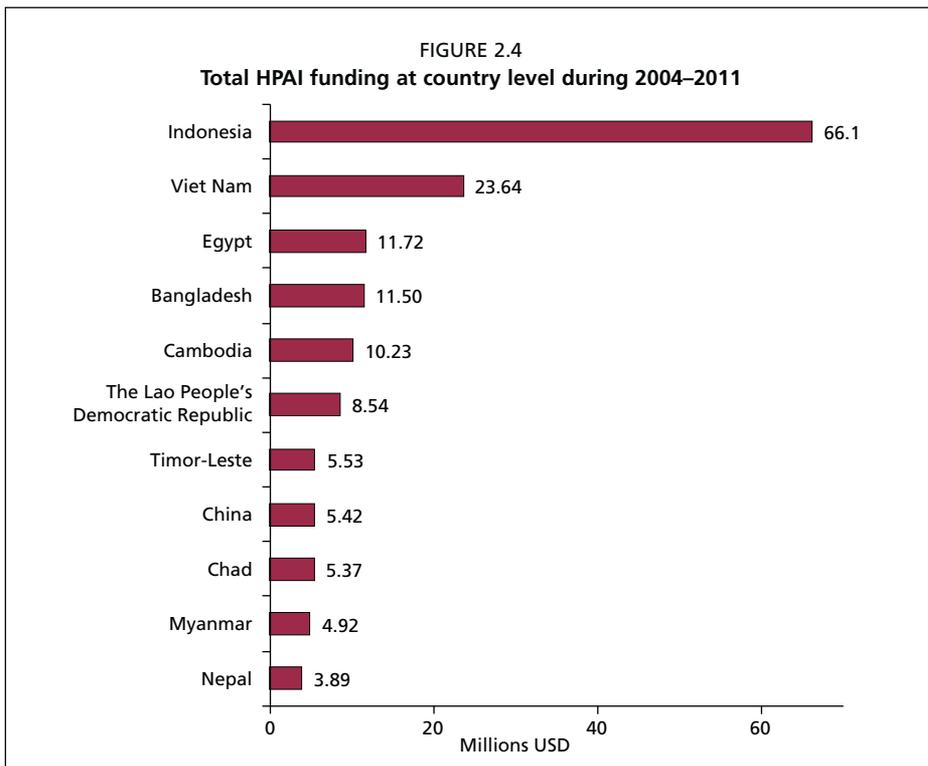
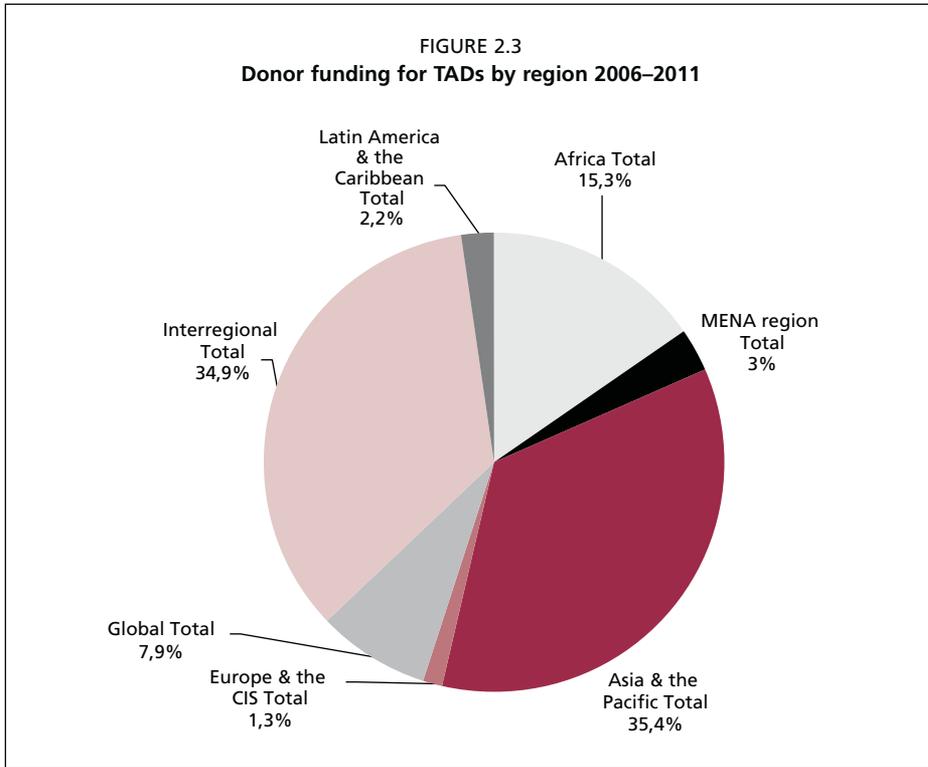


North African Region (MENA) received 5.6 percent (US\$18.3 million) of total HPAI funding. Cumulatively, Europe and the Commonwealth of Independent States (CIS),³⁴ Latin America and the Caribbean (LAC) and interregional projects have received a total of US\$16.3 million in donor assistance (5.1 percent of the overall HPAI portfolio).

Similar dynamics can be observed for TAD funding in terms of geographic distribution, with Asia being the major recipient of the overall TAD funding (35.4 percent of the portfolio at US\$26 million). In addition, Asia received an almost equal share for interregional projects (34.9 percent at US\$25.7 million). The African region received 15.3 percent of the overall TAD portfolio (US\$11.3 million) in donor assistance, followed by funding for global projects (7.9 percent of the portfolio at US\$5.8 million). Together, the projects operated in Europe (including CIS), MENA and LAC regions, received 6.5 percent of the overall TAD funding (US\$4.9 million). Figure 2.3 provides details on the donor funding for TADs by region.

In terms of country allocation of donor funds, Figure 2.4 provides details of the top 11 recipients of HPAI funding. Nine of the countries are in Asia and the remaining two are Chad and Egypt. Three of the top four countries (Indonesia, Vietnam and Bangladesh) are endemic countries where emerging and re-emerging high-impact diseases are considered likely, and in Egypt the ongoing HPAI situation remains unstable. The total budgets for these 11 countries comprise nearly 49 percent (US\$157 million) of the total HPAI funding.

³⁴ CIS includes Armenia, Azerbaijan, Belarus, Kazakhstan, Kyrgyzstan, Republic of Moldova, the Russian Federation, Tajikistan and Uzbekistan.



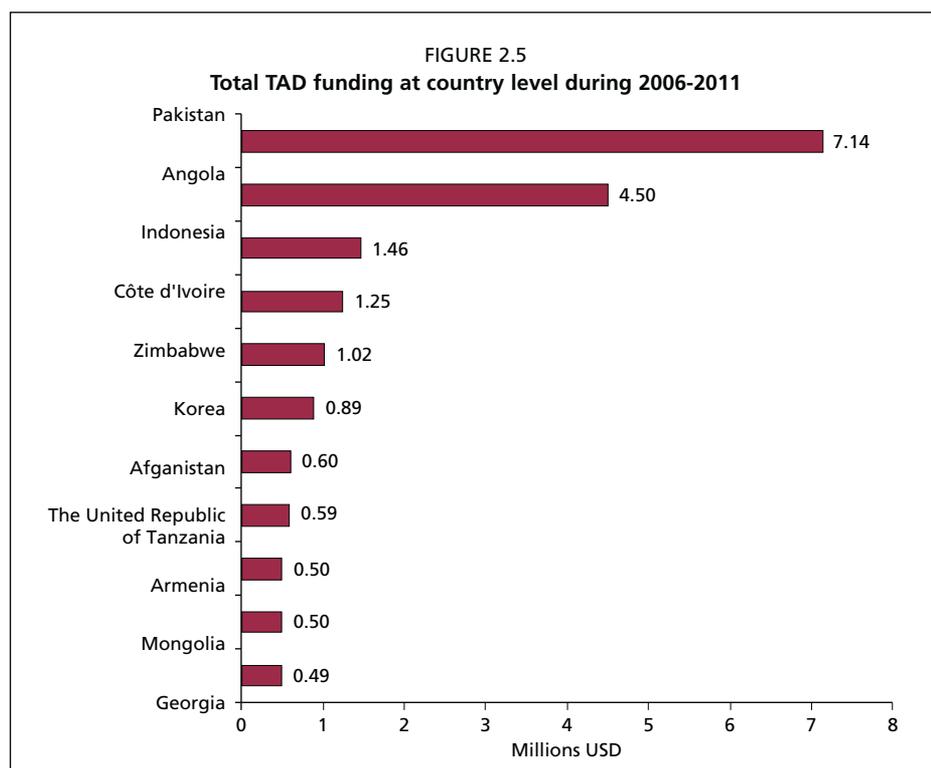
The country distribution of the TAD portfolio presents a slightly different pattern with the main recipients being almost equally distributed in Asia (five countries) and in Africa (four countries). The remaining main recipient countries are the CIS countries, Georgia and Armenia. The total funding for the top 11 countries amounts to nearly 26 percent (US\$19 million) of the overall TAD portfolio (see Figure 2.5 for details).

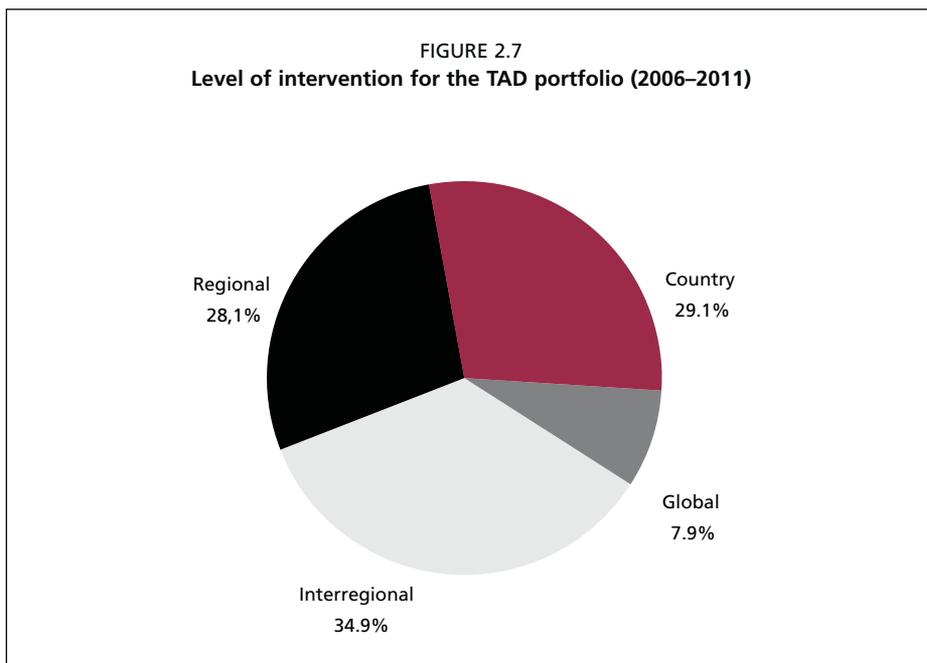
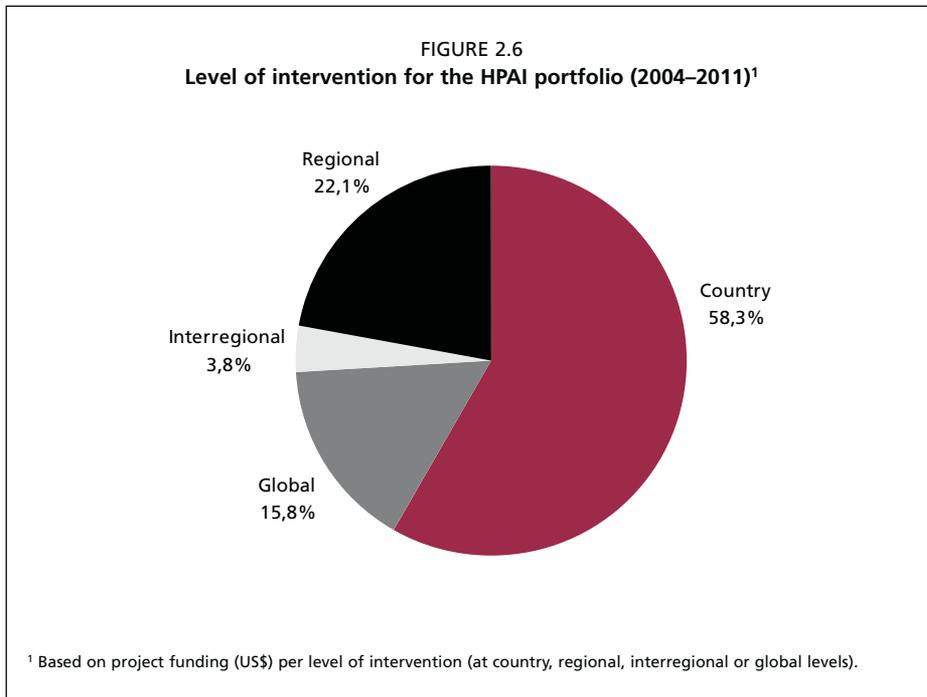
LEVELS OF INTERVENTION

The country focus has been at the heart of the FAO global programme and has proved crucial to the success of the FAO response to HPAI. National activities have been essential in building and strengthening basic animal health related capacities in the affected countries.

Currently, the simultaneous interventions at the global, regional and country levels provide greater efficiency and effectiveness of programming and implementation of HPAI prevention and control, as well as allowing for a more integrated response that is in line with the One Health agenda.

While 2011 prioritized focus at the local and national levels, regional and global levels also needed attention within the HPAI and TAD portfolio. The transboundary nature of HPAI and other high-impact diseases requires continued and improved cross-border cooperation and collaboration in disease intelligence, detection, control and prevention. Within the HPAI portfolio, as of December 2011, 58 percent of projects have been implemented at the national/country level; 26 percent at the regional/interregional level; and 15.8 percent at the global level (see Figure 2.6).





For the TAD portfolio (see Figure 2.7), the trend is clearly defined by the Interregional projects amounting to approximately 35 percent (US\$25.7 million) of the overall TAD funding, followed by the country project allocations of 29 percent (US\$21.5 million).

LONGER-TERM HOLISTIC MULTIDISCIPLINARY APPROACH TO HPAI AND HIGH-IMPACT ANIMAL AND ZONOTIC DISEASES

The projects introduced in the immediate aftermath of HPAI outbreaks in early 2004 were mainly implemented to address the pressing concerns of controlling the HPAI outbreaks in the affected countries. While the short-term response focus is increasingly moving towards a longer-term sustainable approach, the declining global programme funds and the difficulty in engaging donors on projects on a longer-term basis present significant challenges.

In terms of the multidisciplinary aspects of the HPAI projects, the ongoing portfolio is still focused on the veterinary disciplines of surveillance, response, strengthening of veterinary services and laboratory capacity. However, following the Second Real-Time Evaluation of FAO's work on Highly Pathogenic Avian Influenza (RTE 2)³⁵ recommendation to develop a more integrated and multidisciplinary approach, there is a greater integration of other areas of work such as biosecurity, socio-economic and market analysis, communication, public/private partnerships and wildlife aspects into the HPAI and TAD projects.

ONE HEALTH STRATEGIC AP: CURRENT AND FUTURE FUNDING REQUIREMENTS

One Health is a collaborative, cross-sectoral, multidisciplinary approach to address health threats and reduce risks of existing, emerging and re-emerging infectious diseases. More specifically, it acknowledges the animal-human-ecosystem interface, and places disease dynamics into the broader context of agriculture and socio-economic development and environmental sustainability. FAO's strategic AP (2011–2015) recognizes the animal-human-ecosystem interface. Its activities contribute to the prevention and containment of major animal diseases and related human health risks globally as well as increasing sustainable livestock production. It emphasizes FAO's comparative advantage in taking a broad, multidisciplinary approach to problem solving, and in building on investments and lessons learned from the HPAI programme through cooperation with national governments, subregional, regional and global organizations, and with donor agencies. The plan also proposes to enhance knowledge on how to strengthen global animal health management and engage countries in a long-term development towards prevention, control and response to animal and public health risks attributable to zoonoses and priority animal diseases.

Once endorsed in March 2011, FAO began implementing the strategic AP in July 2011 at the local field level, with further development underway in 2012 at local, regional and global levels. Initially, implementation began by mapping all ongoing projects on HPAI and other high-impact diseases (transboundary and zoonotic) against the five technical areas of work of the plan. New projects are integrated as they are funded. Available project funds in July 2011 (US\$38.4 million) and new funding (US\$37.8 million) since July 2011, for a total of US\$76.2 million have allowed continued HPAI activities, as well as the initiation of some priority activities at global and country levels. Incremental resources of US\$117.6 million (AP total of US\$193.8 million with US\$76.2 million already received) will be required to cover all activities of the AP over the projected five-year period. Of this, US\$51 million

³⁵ Second Real-Time Evaluation of FAO's work on Highly Pathogenic Avian Influenza (available at <http://www.fao.org/docrep/meeting/019/k8501e.pdf>).

TABLE 2.4
Gap in funds for the six priority areas identified for 2012–2013

Priority areas	Funding requirements (US\$ million)
Priority 1 HPAI	15.0
Priority 2 Progressive control pathway for priority diseases	11.5
Priority 3 Emergency response capacity	4.0
Priority 4 Understanding drivers of diseases	8.0
Priority 5 Disease intelligence and early warning	4.5
Priority 6 Disease impact and socio-economic analysis	8.0
Total funding needed 2012–2013	51.0

would be required to support and focus work for 2012–2013 within the six priority areas³⁶ of the AP indicated in Table 2.4.

The key outcomes of the AP are expected to be reduced incidence of animal diseases and the associated human health risks as well as improved preparedness for, and effective response to, food and agricultural threats and emergencies. These outcomes will result in improved livelihoods and public health, reduced poverty and enhanced food security for the poor communities of today's global society, thereby contributing significantly to the achievement of key FAO strategic objectives and the Millennium Development Goals (MDGs).

PARTNERSHIPS WITH GLOBAL AND REGIONAL PARTNERS

The activities of the HPAI global programme and all other animal health activities in this report are carried out in conjunction with partner organizations and donors. These activities are linked to the FAO strategic framework which is detailed in The Director General's Medium Term Plan 2010–13 and its biennial PWB. Specifically, the activities of the HPAI programme and the AP contribute to SO-B of the plan (increased sustainable livestock production) and SO-I (improved preparedness for, and effective response to, food and agricultural threats and emergencies). Activities also support other FAO strategic objectives related to food safety, fisheries, natural resources management and gender, and the Millennium Development Goals (MDGs) addressing global partnership, hunger and poverty, and natural resource management.

The AP calls for cross-sectoral and multidisciplinary collaboration between animal, human and wildlife health sectors. FAO has a variety of mechanisms for interaction with partner organizations, which are utilized in the HPAI global programme and the AP. In this

³⁶ Given the wide range of activities supporting the AP and the limited funding resources currently available, six broad priority actions have been identified for the first phase of the AP (2011–2013). Identification of these priority areas takes into account the immediate capacity requirements and needs for better management of animal-associated health threats at global, regional and country levels, as well as FAO's mandate and comparative advantages. As the AP progresses and more funding becomes available other noteworthy activities will be undertaken to complement the ongoing activities in order to achieve the goals and objectives of the AP by 2015.

respect, FAO is working, in close collaboration with its global partners such as OIE and WHO, to incorporate these dimensions of animal, ecosystem and public health protection, introducing a broader scope in disease risk analysis and management. Together with UNEP, FAO is co-convenor of the Task Force on Wildlife Diseases. Regular partnership consultations and collaborative discussions take place on a consistent basis via multiple specific meeting venues in order to better coordinate, decrease redundancies and facilitate partnership efforts. Collaborative efforts are fostered particularly through work and activities under the following initiatives:

- the Tripartite FAO/OIE/WHO agreement to advance the One Health agenda at the global level;
- GF-TADs, a shared FAO/OIE initiative, to target TADs and major zoonoses;
- GLEWS, a joint FAO/OIE/WHO tool, to provide alerts and early warning messages with forecasting and disease intelligence support. GLEWS work relies on livestock and animal health risk mapping facilities, disease information software packages and global level data repositories, shared with OIE and WHO;
- CMC-AH to coordinate interventions in response to TAD outbreaks, providing emergency response and initial risk assessment with identification of immediate strategies for disease control and prevention; and
- OFFLU to support laboratory and field surveillance programmes that manage data on animal pathogens and integrate other relevant disease information sources at national, regional and global levels.

In addition to these coordination platforms, other initiatives are now encompassed in the FAO AP to foster collaboration and partnerships with OIE, WHO and others. These include, but are not limited to:

- The Emerging Pandemic Threats (EPT) Program, a USAID-funded initiative established in 2009 to expand upon the lessons learned in combating the global H5N1 HPAI pandemic. Within this initiative two programmes support specific activities of the AP:
 - i EPT plus; a new joint programme that will reflect the honing of FAO's surveillance of influenza viruses over the years, which now increasingly focuses on monitoring for pathogens with pandemic potential in the mixing of crowded human populations with animals and wildlife.
 - ii IDENTIFY; a joint programme established to address gaps and strengthen collaboration in human and animal health laboratory and surveillance activities. This includes: continuing facility upgrading, training and collaboration between regional and international reference laboratories for diagnostics and quality assurance, increased cooperation between human and animal surveillance systems in analysing data, timely sharing of comparable epidemiological and pathogen data and effective strategies for improving national, regional and community level pandemic preparedness and response.
- A European Union-funded project highly pathogenic and emerging (or re-emerging) diseases (HPED) provides funding to strengthen animal health and human health services and to develop regional efforts to combat H5N1 and other diseases in South Asian Association for Regional Cooperation (SAARC) and Association of Southeast Asian Nations (ASEAN) countries.

- A collaborative effort with AU-IBAR and OIE is related to improving veterinary governance to support regional economic communities such as East African Community (EAC); Economic Community of West African States (ECOWAS); the Intergovernmental Authority on Development (IGAD); the South African Development Community (SADC); and the Union du Maghreb Arabe (UMA) at the country level. This effort enables national veterinary services in Africa to enhance institutional capacity for animal health policy and strategy formulation and implementation based on clear governance principles, and to use socio-economic data to leverage resources and to target interventions.
- Information regarding other collaborative programmes is available upon request (e.g. the Australian Partnership on Global Animal Health and Biosecurity Initiatives; or support for the One Health initiative in sub-Saharan Africa and Bangladesh through an Irish trust fund project). Information is also available upon request regarding ongoing efforts to secure funding or partnerships with various private sector groups, foundations, academia and others.