



Cambodia's Victim Zero: Global and National Responses to Highly Pathogenic Avian Influenza

Sophal Ear

Cambodia



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Cambodia's experience with Highly Pathogenic Avian Influenza (HPAI) since the disease was discovered on a farm outside Phnom Penh in January 2004 reveals important aspects of how a developing country with limited resources and capabilities has responded to a crisis that has global public health implications and, vice-versa, how this global response in turn affected Cambodia. Augmented by a survey sent to individuals deeply involved in HPAI work in Cambodia, this study uses a qualitative research methodology consisting of mostly one-on-one semi-structured interviews across government, the private sector, and the non-governmental sector. Measures have been taken to cope with AI such as public awareness campaign 'Super Moan' and Pandemic Preparedness, border control over the movement of poultry with neighbouring countries, Vietnam and Thailand, culling of poultry, and case-based secret compensation. The study provides background to Cambodian political and modern history and sets the context of aid dependence and tourism, the livestock sector and poultry in particular. It then proceeds in three parts, from beginning, middle, to end on how HPAI evolved, providing a narrative timeline of the key policy moments/phases between the first outbreak and to date (December 2008). Three narratives are explored: (1) culling without compensation; (2) the shift to health; and (3) the role of poverty and livelihoods. The study then discusses three key themes that define the political economy of the policy process. These are: (a) Donors and NGOs; (b) Beyond Aid: Other Sources of Revenue and the Importance of Tourism; and (c) Media Spin. The overall analysis of the political economy of Avian Influenza in Cambodia reveals key challenges, obstacles and opportunities for responding to HPAI—and potentially other global epidemics.

About the Author

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ACRONYMS

AED	Academy for Educational Development
AHI	Avian and Human Influenza
AHICPEP	Avian and Human Influenza Control and Preparedness Emergency Project
AI	Avian Influenza
AusAID	Australian Agency for International Development
BCC	Behaviour Change Communication
CDC	Communicable Disease Control
CP	Charoen Pokphand
CPIA	Country Policy and Institutional Assessment
DAHP	Department of Animal Health and Production
FAO	Food and Agriculture Organization of the United Nations
GDP	Gross Domestic Product
GNI	Gross National Income
HPAI	Highly Pathogenic Avian Influenza
H5N1	Subtype of the Influenza A virus which can cause illness in humans and many other animal species
IAs	Implementing Agencies
IEC	Information, Education, and Communication
MAFF	Ministry of Agriculture, Forestry and Fisheries
MoEYS	Ministry of Education Youth and Sports
MoH	Ministry of Health
NAMRU-2	U.S. Naval Medical Research Unit No. 2
NaVRI	National Veterinary Research Institute
NCDM	National Committee for Disaster Management
NGOs	Non-Governmental Organizations
OIE	World Organisation for Animal Health
PE	Participatory Epidemiology
RGC	Royal Government of Cambodia
SARS	Severe Acute Respiratory Syndrome
USAID	United States Agency for International Development
US-CDC	US Centers for Disease Control
WHO	World Health Organization

1. INTRODUCTION

Cambodia's experience with Avian Influenza (AI) since the disease was discovered on a farm outside Phnom Penh in January 2004 reveals important aspects of how a developing country with limited resources and capabilities has responded to a crisis that has global public health implications and, vice-versa, how this global response in turn affected Cambodia. Unlike Thailand, Vietnam, and Indonesia, the case of Cambodia offers a prime example of the influence of foreign aid on a weak state where average civil servant wages are equal to the garment workers' minimum wage, conflicting priorities in which the drive for tourism dollars and the need for public health can be at odds with one another, patronage politics, and the challenges of operating in a heavily NGO and donor-driven, projects-based environment in which each project can become its own silo.

This paper examines a larger aspect of a particular problem faced by the international response, acting to swamp an already weak state administrative and policy capacity, and providing an unusually large scope for uncoordinated action, duplication and corruption (in the form of rent-seeking). Already awash in donor money,¹ Cambodia played its role on a global policy stage in both clamouring for its share of the Avian Flu pie and becoming an incubator for donor trial-and-error experiments on how to achieve above all else one goal: minimising the risk of Avian Influenza's spread inside Cambodia and, more importantly, to reduce pandemic potential that could strike donor countries themselves.²

A key turning point in shifting the focus from animal health to human health took place a year later in January 2005 with the discovery of Cambodia's first confirmed victim *not* in Cambodia, but in Vietnam. This led to the publication of news accounts critical of Cambodia's notoriously weak health infrastructure, or lack thereof. Indeed, a one page 18 February 2005 story in *Science*, the magazine of the American Association for the Advancement of Science, entitled 'First Human Case in Cambodia Highlights Surveillance Shortcomings' warned that 'The diagnosis was made not in Cambodia but in neighbouring Vietnam, where the 25-year-old woman had sought treatment and died on 30 January' adding that 'the woman's 14-year-old brother had died earlier of an apparent respiratory disease now suspected to be H5N1, but his remains were cremated before any samples were taken.' (Normile 2005: 1027) Two weeks later, a 5 March *Wall Street Journal* article by Jaems Hookway entitled 'In rural Cambodia, dreaded avian influenza finds a weak spot' relates the valiant efforts of Cambodia's 'chief flu-hunter at the cash-strapped Ministry of Health' whose 'emergency budget for educating [Cambodia's] 13 million people about bird-flu dangers is just \$2,500.' (Hookway 2005)

Not only had Cambodia failed to detect its first human victim, crucial evidence of possible spread had been forever destroyed. Confirmed was an extant image of Cambodia as a hapless nation-state, so fragile

¹ In 2006, aid was 7.6 per cent of Gross National Income, a relative decline from previous years—which from 1993-2006 averaged nearly 11 per cent. The total amount of official development assistance and official aid totalled nearly \$6 billion in that same period, and per capita aid averaged a relatively generous \$33 per capita per year, peaking at \$48 per capita in 1995 and remaining above \$35 per capita since 2002.

² Indeed, as the STEPS Centre (undated) website notes, 'The potential of human-human transmission of virulent influenza derived from an avian flu viral strain has raised alarm bells across the world. The prospect of a major public health catastrophe on the scale of that experienced in 1918 – or worse - has meant considerable resources have been invested in developing surveillance and response systems. But how effective are these responses? And who are the likely winners and losers? Are such response systems robust, durable and resilient, in the face of unknown, and perhaps unknowable, shocks and stresses, and a complex and dynamic viral ecology?'

and incapable that it had failed to protect³—indeed had murdered—its own citizens in the mid-1970s causing the death of nearly a quarter of its population in now infamous ‘Killing Fields’ where the fanatical Khmer Rouge regime had reset time itself to Year Zero. Now Cambodia risked being Ground Zero for the next global pandemic after more than a decade of donor intervention to ‘develop’ the country. Failing to ‘intervene’ in Cambodia could lead not to the next Afghanistan, where Jihadist fighters trained and plotted against the West, but to the next epicentre, where Victim Zero of the next global pandemic could originate.⁴

This study picks-up more than three years after articles similar to the one in *Science* and the *Wall Street Journal* exposed Cambodia’s weak health system.⁵ Playing its part as an ‘infected’⁶ country, Cambodia asked donors for \$32.5 million at the 17-18 January 2006 International Pledging Conference on Avian and Human Influenza in Beijing, (World Bank 2006c) which has since resulted in at least 15 implementing partners slated to execute \$22 million for 2008-2009⁷ to combat Avian Influenza and promote Pandemic Preparedness across four areas: Animal Health, Human Health, Information, Education, and Communication (IEC), and Pandemic Preparedness itself.⁸ Indeed, so severe was the concern that the United States, which following the events of 5-6 July 1997⁹ to February 2007 had barred direct government-to-government support of Cambodia, while giving hundreds of millions of dollars to non-governmental organisations (NGOs), allowed an exception for the US Centers for Disease Control (US-CDC) to work directly with the government of Cambodia. US-CDC has funded AI activities in Cambodia since 2005 to strengthen animal and human surveillance systems,¹⁰ to train animal and human health

³ The responsibility to protect, an emerging concept of international law in the 1990s, is invoked for the right of humanitarian intervention, both when intervention has happened—as in the case of Kosovo or Georgia—and when it has failed to happen as in the case of Rwanda or Myanmar.

⁴ The media shape public perceptions and their collaboration in dealing with future animal health crises is essential. For example, the British Broadcasting Corporation (BBC 2006) aired a highly polished 90 minute drama called ‘Pandemic’ at 9pm (primetime) 7 November 2006 on BBC Two, and rebroadcast on Australia’s Special Broadcasting Service, watched by more than seven million Australians each week that involved a 16 minute scenario in which Cambodia is the origin of the next pandemic <http://www.youtube.com/watch?v=YeL3pM8L8DA>. Of course, many factors contribute to the emergence and intensification of zoonotic diseases. These include economic factors (i.e. developing technologies, increased international travel and trade, novel agricultural and industrial applications) social and cultural factors (i.e. food habits, religious practices, lack of adequate health care, changes in human behaviour and farming practices), human and animal demographic factors (i.e. aging populations in developed countries, urbanisation, population growth, availability of new hosts, and movement of animals into new landscapes), environmental factors (i.e. global climate change, lack of adequate sanitation, and land use practices that result in human contact with previously remote habitats), and evolutionary factors (i.e. microbial adaptations, enhanced infectiveness and pathogen changes) to mention a few.

⁵ *Time* magazine’s Bryan Walsh had a 28 February 2005 entitled ‘Bird Flu Spreads Its Wings’ quotes Dr. Guan Yi, an Avian Influenza expert at the University of Hong Kong: ‘In countries like Cambodia they don’t have a systematic surveillance program...’

⁶ World Bank (2006a: 19) includes Cambodia among ‘infected countries’ and defines the term as ‘countries where initial outbreaks of HPAI were not contained, resulting in the further spread of HPAI to a large proportion of poultry sector and to other areas of the country. Infected countries where human cases have been recorded will require significant assistance to control and eradicate the disease progressively from the poultry sector and prevent further human cases.’

⁷ UNRC (2008) The total is \$22,251,906 to be precise; a figure that includes ongoing programs started in 2006-2007, but does not include in-kind contributions. A finance gap of \$2,383,439 has been identified.

⁸ These categories of course are interrelated, and self-reinforcing. For example, animal health is not only for the benefit of animals, but for the benefits of humans too.

⁹ Fighting broke-out in Phnom Penh and the First Prime Minister was deposed.

¹⁰ Writing about FAO’s support to the RGC to strengthen its capacity to diagnose, survey, and control AI, Desvaux et al. (2006: 211) note: ‘Different surveillance tools are being tested, such as market monitoring and a sentinel

front-line workers to detect and respond to disease outbreaks and to support a successful national behaviour change communications program.¹¹

The objective of this research project is to investigate the politics of policy processes surrounding the response to Highly Pathogenic Avian Influenza (HPAI) H5N1 in Cambodia, identifying key actors, networks, associated narratives, and practices of policy.¹² The aim of this study is to question the assumptions being made, and explore different framings in the debate, including those often not heard in mainstream policy circles. The overall analysis of the political economy of policy will reveal key challenges, obstacles and opportunities for responding to avian flu – and potentially other global epidemics.¹³ More specifically, within the context of Cambodian history and political economy, timelines, narratives, actors/networks, and politics/interests, this research project examines the following overarching questions:

1. Timelines — which key policy moments/phases, spaces, actors define policy change?
2. Narratives — what competing storylines exist—and what silences narratives?
3. Actors/networks — who says what, to whom, and how?
4. Politics/interests — how and why do certain versions dominate?

The study has the following structure: following this introduction (**Section 1**), a brief discussion of methodology is laid out; **Section 2** provides background to Cambodian political and modern history, sets the context of aid dependence and tourism, the livestock sector and poultry in particular. It then proceeds in three parts, from beginning, middle, to end on how HPAI evolved, providing a narrative timeline of the key policy moments/phases between the first outbreak and to date (December 2008). Using this established timeline of key moments, **Section 3** examines three policy narratives: first, culling without compensation, second the shift to health, and third the looming question of what's poverty and livelihoods got to do with it? This is then followed by actors, networks, and interests mapping, offering a glimpse of how effective Government and donors were in intervening against AI across animal, human, livelihoods, pandemic preparation, or some other dimension of the respondent's choosing. It makes use of the results of an elite survey undertaken in May-June 2008 and sent to 300 individuals involved in AI in Cambodia. **Section 4** hones-in on three key themes defining policy of particular interest arising from the previous sections. These are: (a) Donors and NGOs; (b) Beyond Aid: Other Sources of Revenue and the Importance of Tourism; and (c) Media Spin. **Section 5** concludes the study by revisiting the triggers and stakeholders involved, linking their responses and actions towards a political economy of avian influenza in Cambodia.

villages' network, to offset the weakness of the national passive surveillance network. Several constraints were identified ... such as a lack of motivation among provincial staff, the limited capacity of the central team to compile and analyse the data generated, the reluctance of farmers to have their animals sampled, and weak diagnostic capacities. The sustainability of such a surveillance system once international support ends remains to be seen. Participatory epidemiology (PE) may be an appropriate complementary tool to track diseases. PE works on the principle that livestock keepers often possess detailed knowledge of animal diseases and can provide valuable diagnostics that could help in identifying AI outbreaks, particularly in remote areas.'

¹¹ http://cambodia.usembassy.gov/ai_briefing.html & http://cambodia.usembassy.gov/sp_051707a.html The United States Government is supporting the Royal Government of Cambodia to reduce human exposure to Avian Influenza through the technical expertise of several U.S. agencies. These agencies are USAID, the US-CDC, the U.S. Department of Agriculture, and the U.S. Naval Medical Research Unit No.2 (NAMRU-2).

¹² ADI (2007: 2) examined the legislative context dating all the way back to the 1980s, during the People's Republic of Kampuchea; it 'is a literature review of the impact of HPAI on the Cambodian Poultry Sector. The fieldwork for the report was carried out in May 2007. The report involved the analysis of background data, field trips and key informant interviews with people involved in all sectors of the poultry sector in Cambodia.'

¹³ This aim is drawn from STEPS Centre (undated) www.steps-centre.org

A Few Words on Methodology

This study uses a qualitative research methodology consisting of mostly one-on-one semi-structured interviews across government, the private sector, and the non-governmental sector. These include, but are not limited to: government officials, donor and NGO representatives, the private sector (including conglomerates, farmers and wet market stallholders), and civil society representatives. These interviews were conducted over the course of three visits to Cambodia in total.¹⁴ The first was a preliminary visit in February 2008 (one week), the second was in May 2008 (two weeks), and the third was in June 2008 (one week). The work overlapped with an assignment to write on the Political Economy of Growth in Cambodia, examining garments, rice, and livestock. Work was aided by the fact that the author had already examined livestock in 2004-2005 in Ear (2005), and had specifically studied it during the pre-human influenza phase of the disease, when livelihoods was the primary concern in a pro-poor livestock policy setting.

In addition, a survey was launched on 27 May 2008 and sent to 308 e-mail addresses of individuals known to be involved in Avian Influenza work in Cambodia. Of these, 44 visited the survey website, and 17 completed responses were received. The survey contained 14 questions, requesting that the author rate performance on a Likert scale. It also allowed for written responses, which many respondents partook.

2. TIMELINE—MOMENTS

Background

Political Structure and Modern History

Cambodia is a constitutional monarchy with three branches of government (legislative, executive, and judicial) in which the King 'shall reign but shall not govern' according to Chapter 2, Article 7 of the Constitution.¹⁵ In the First Mandate (1993-1998) the legislative branch was unicameral with only a National Assembly but two Prime Ministers serving jointly. By the Second Mandate (1999-2003), it became bicameral, adding a Senate¹⁶ to the already existing National Assembly. The Senate is intended to review legislation, but is too often merely a rubberstamp, as is the National Assembly. With the formation of the Third Mandate in 2004, the Heritage Foundation (2005) called the coalition deal 'patronage at its worst' with one Prime Minister, seven Deputy Prime Ministers, 15 Senior Ministers, 28 Ministers, 135 Secretaries of State, and at least 146 Under-Secretaries of State. While the main political

¹⁴ More than 40 face-to-face interviews were conducted in Khmer, French, and English primarily in Phnom Penh and the environs, but with one site visit to the province of Kampong Som. A visit to Psah Orussey's wet market was also made to gain an appreciation for conditions on the ground. The author was not well received when photographing the wet market and sternly warned 'not to spread false stories in newspapers' by wet market seller. Average interviews lasted anywhere from 45 minutes to hours (if over a meal typically). Information from informants used in this paper is coded numerically (1 through 40+) to protect identities and a complete list is shown in Table 1.1 of Annex 1. The number in parenthesis following that informant's title descriptor appears to the left in the list of informants and is randomly assigned.

¹⁵ <http://www.cambodia.gov.kh/unisql1/egov/english/organ.constitution.html>

¹⁶ The Senate was created because the head of the National Assembly during the First Mandate had to cede his place to the Former First Prime Minister whose party lost the election.

parties are discussed in subsequent sections, the army is its own power centre and merits a brief examination here. Since the broad strokes of Cambodian contemporary history are well-known, this report will not delve into them to any great extent beyond Table 2.1 below, and in the subsequent pages.

Table 2.1: Transition of Legal, Political, and Economic Systems in Cambodia

Period	Legal System	Political System	Political Power	Economic System
Before 1953	French-based civil code and judiciary	Under French protectorate	Held by the French	Colonial
1953-1970 (The Kingdom of Cambodia)	French-based civil code and judiciary	Constitutional monarchy	Held by King Norodom Sihanouk (until he abdicates in 1955) then as Prince Norodom Sihanouk alternately as Prime Minister or Head of State of an elected government known as the Sangkum Reastr Niyum or People's Socialist Community (1955-1970)	Market and then nationalisation
1970-1975 (The Khmer Republic)	French-based civil code and judiciary	Republic	Held by Lon Nol and Sirik Matak with U.S. support	Market, war economy
1975-1979 (Democratic Kampuchea)	Legal system destroyed	All previous systems abolished, extreme Maoist agro-communism	Held by Pol Pot and the Khmer Rouge with Chinese and North Korean support	Agrarian, centrally planned
1979-1989 (The People's Republic of Kampuchea)	Vietnamese communist model	Communist party central committee and local committees	Held by the Kampuchean People's Revolutionary Party which picks Hun Sen as Prime Minister beginning in 1985 (Vietnamese backed with 100,000 troops; Soviet support)	Soviet-style central planning
1989-1993 (The State of Cambodia)	Greater economic rights	Communist party central committee and local committees	Held by Cambodian People's Party CPP (renamed from KPRP) with Hun Sen as P.M. (Vietnamese backed, all troops withdrawn)	Liberalized central planning

Period	Legal System	Political System	Political Power	Economic System
1993-1998 (The Kingdom of Cambodia) <i>First Mandate</i>	French-based civil code combined with common law in certain sectors	Constitutional monarchy in which the King reigns but does not rule	Shared between Ranariddh (Funcinpec) and Hun Sen (CPP) in a unique arrangement of co-Prime Ministers with required 2/3 supermajority for governing coalition	Transition to a market economy
1998-present <i>Second, Third and Fourth Mandates</i>	As above	As above	Held by Hun Sen as Prime Minister in a CPP-Funcinpec coalition government that required a 2/3 supermajority until 2006 when the Constitution was changed to allow 50% +1	Market economy

Notes: The 1993-1998 period is often seen as an Emergency Phase, while the 1998-present period is seen as a Development Phase. Pol Pot died in 1998, the Khmer Rouge (KR) disbanded completely in 1999.

Source: Adapted from Wescott (2001) based on Chandler (1991) and MLG and DFDL (1999).

Further consolidation of CPP power occurred during the run-up to the second election held in 1998. Events leading up to it firmly entrenched the primacy of the military over the forces of democracy. On 5-6 July 1997, Ranariddh was ousted by Hun Sen, resulting in more than 70 extrajudicial killings of mostly Funcinpec civilian loyalists. Although the precise details may never come to light, the general storyline is that in the lead-up to the events, a power struggle between Funcinpec and the CPP emerged in recruiting senior Khmer Rouge defectors. This led, for all intents and purposes, to a coup d'état.

Forces loyal to the Second Prime Minister launched violent and sustained attacks against forces loyal to the First Prime Minister (claiming that the former was ready to take sole power) in Phnom Penh and the surrounding area. To preserve the semblance of normalcy, the Minister of Foreign Affairs and International Cooperation, who belonged to Funcinpec, was named First Prime Minister. In the aftermath of 1997, there was no doubt who called the shots, and the entire military landscape shifted as a result. Seeing as much, the KR movement dissolved shortly after the death of Pol Pot in 1998 and the defection of Nuon Chea, Khieu Samphan, and other leaders shortly thereafter. A mixed UN-Cambodian Tribunal located on the outskirts of Phnom Penh has indicted Nuon Chea, Khieu Samphan, and three other KR leaders. All five sit in cells in the Tribunal compound awaiting trials which will start this year and could go on for several years.

Politics in Cambodia is predicated on power and money; as the previous elections demonstrate, the CPP has both in ample supply. As it stands, Hun Sen—a man the *Economist* characterised on 6 August 2008 as 'One of the last (we hope) Asian strongmen'—is the longest serving Prime Minister in Southeast Asia. The CPP's political base is concentrated at the village level in the rural provinces, where it exerts greater influence on the people through its network of village, district, and commune chiefs (the latter were, until 2002, entirely appointed by the CPP).

A large part of the Khmer Rouge legacy shapes the current regime's thinking and the manner in which it behaves. Indeed, the current regime credits itself with having vanquished the Khmer Rouge threat and brought stability to Cambodia. In this context, what would become the CPP was a faction of the Khmer Rouge that defected to Vietnam after relentless purges of the Eastern Zone of Democratic Kampuchea, where many of the original members of the faction first hailed, by the Pol Pot faction. The CPP top leadership comes from the lower echelons of the pre-1977 Khmer Rouge movement and has yet to reconcile itself with this chapter of its history.

As the coup against Ranaridh exemplified, the role of the military in Cambodian politics should not be underestimated. Arguably, the military is the fundamental base of Hun Sen's power; most military forces near the capital are loyal to him. Loyalty in Cambodia, of course, is bought; a good chunk of the government budget is expended on defence and, in turn, partly used for illicit activities by senior members of the military. Because of non-transparent parallel budgets, no-one really knows how much is actually spent on feeding this machine. One estimate puts it close to \$300 million or almost half the official government budget. A good chunk of this money disappears in a budgetary black hole; according to observers, most personnel are 'ghost soldiers' or not active, but their salaries are paid and their supplies provided (then resold or never delivered, but invoiced).

Aid Dependence and Tourism

Most recently, 1993-2006 saw nearly \$6 billion in Official Development Assistance (ODA) and Official Aid in current dollars. This averaged a relatively generous \$33 per capita per year, peaking at \$48 per capita in 1995 and remaining above \$35 per capita since 2002, making the country one of the most aid dependent in the world. In 2003, approximately \$514 million of ODA was disbursed, equivalent to 11.5 per cent of gross national income. While ODA has increased somewhat since then,¹⁷ GDP growth has also been dramatic. Thus, the country is less aid dependent now if measured as per cent GDP than it was four years ago. Unfortunately, such generous aid infusions have not been met with improved domestic tax revenue collection from 2002 to 2006 (years for which data is available). Indeed, tax revenues never exceeded 8.2 per cent of GDP during that period, an abysmal figure by world standards, and on par with Niger, Tanzania, and Togo.¹⁸ This is also reflected in anemic domestic revenue performance.

Table 2.2 shows recent trends in aid, tax, and domestic revenues for Cambodia. The steady decline in Aid (per cent of GNI) from 2002 to 2006 is due to double-digit GDP growth rates which in turn expanded GNI, the denominator. Likewise, the drop in Aid (per cent of government expenditures) in 2006 is likely due to an expansion of central government expenditures from increased total domestic and tax revenues

¹⁷ Pledges for 2009 amount to \$951.5 million, including \$257 million from China, followed by the European Union with \$214 million, and Japan with \$112 million. While the importance of China in Cambodian politics is undeniable, both as a reason for why Cambodia can exercise independence from Western donors and as a source of attention from the United States towards Cambodia, China itself is not a major donor to Cambodia for Avian Influenza-related activities and is not discussed in any detail in this study.

¹⁸ Data from prior to 2002 is as follows: From 1999 to 2000, domestic revenue grew by only 0.2 percentage point, though by 2001, it was reported to be 11.7 per cent of GDP (with tax revenue of 8.4 per cent of GDP, and direct taxes valued at 1 per cent of GDP). Since then, however, performance has not kept-up, and projections of increases have failed to materialise. Neighbouring Vietnam fared much better (20.6 per cent, 15.6 per cent and 5.5 per cent, respectively), while Lao PDR was on par with Cambodia in terms of total revenue (11.4 per cent of GDP), but performed markedly better in the area of tax revenue (9.2 per cent) and direct taxes (2 per cent). Indeed, other comparable countries to Cambodia are sub-Saharan African: Niger (8.9, 8.3, and 1.5), Tanzania (11.8, 10.6, and 2.7), and Togo (13.8, 12.3, and 0.4). All revenue and tax figures come from International Monetary Fund staff country reports cited in World Bank and ADB (2003: ix).

collected even though tax revenue (per cent of GDP) itself hardly budged from 2005 to 2006. Indeed, while only indicative, patterns suggest that for each year in which ODA and official aid (current US\$) increased, tax revenues (per cent of GDP) decreased, and vice-versa. The same pattern repeats for revenues, excluding grants (per cent of GDP). The Country Policy and Institutional Assessment (CPIA) rating for revenue mobilisation rated right in the middle of a Likert scale (1=low to 6=high) at 3, was unchanged for 2005 and 2006, the only two years for which the rating is available.

Table 2.2: Cambodia's Aid, Tax, and Domestic Revenues 2002-2006

	2002	2003	2004	2005	2006
Official development assistance and official aid (current US\$)	484,250,000	514,310,000	483,190,000	540,680,000	528,990,000
Aid (% of central government expenditures)	120.35	118.66	110.67	113.18	84.68
Aid (% of GNI)	11.79	11.50	9.49	8.99	7.59
Aid per capita (current US\$)	36.52	38.13	35.22	38.74	37.26
Tax revenue (% of GDP)	8.19	7.55	8.15	7.91	8.19
Revenue, excluding grants (% of GDP)	10.31	9.41	9.86	9.68	9.81
CPIA efficiency of revenue mobilisation rating (1=low to 6=high)	N/A	N/A	N/A	3	3

Source: WDI Online. Accessed: 25 August 2008. <http://publications.worldbank.org/WDI/>

Alongside aid dependence and the resulting aid economy, two sectors—garments and tourism account for around 14 per cent of GDP each—have clearly stood out in the past decade for their tremendous contribution to Cambodia's economic growth¹⁹. According to the Economic Institute of Cambodia, the garment sector has added an estimated 2 per cent annually to GDP since 1995, although this is tapering off (EIC 2007: 12). No equivalent contribution to GDP growth is available for tourism, but it has been the main contributor to growth in the services sector which had the largest sectoral (41 per cent) share of GDP in 2007. Threats to tourism include violence and the fear of pandemics such as Severe Accurate Respiratory Syndrome (SARS). Even though SARS' direct impact was to scare away tourists from Cambodia in 2003, explaining in part the nearly 11 per cent drop in visitor arrivals as shown in Table 2.3, alongside anti-Thai riots that took place in late January 2003. Indeed, the only other time a drop in visitor arrivals took place since 1993 was in 1997, the year fighting broke out in Phnom Penh and the First Prime Minister was deposed.

Table 2.3: Visitor Arrivals in Cambodia 1993-2005

Year	Visitor Arrivals		Average Length of Stay
	Number	Change (%)	
1993	118,183	00	N/A

¹⁹ While oil and gas have been much ballyhooed in recent years, Cambodia does not yet have *proven reserves*, and may even have enjoyed an unwarranted spurt in growth on the basis of mere speculation that oil and gas were present in significant quantities in Cambodian waters off the Gulf of Thailand

Year	Visitor Arrivals		Average Length of Stay
	Number	Change (%)	
1994	176,617	49.44	N/A
1995	219,680	24.38	8.00
1996	260,489	18.58	7.50
1997	218,843	-15.99	6.40
1998	289,524	32.30	5.20
1999	367,743	27.02	5.50
2000	466,365	26.82	5.50
2001	604,919	29.71	5.50
2002	786,524	30.02	5.80
2003	701,014	-10.87	5.50
2004	1,055,202	50.53	6.30
2005	1,421,615	34.72	6.30
2006	1,700,041	19.59	6.50

Source: Ministry of Tourism (2006), as cited in Chheang (2008: 292)

Box 2.1 encapsulates some of the thoughts informants shared on tourism's importance, which suggest that the key governance problem for tourism is in general not corruption or concentration, but unaddressed market failures such as lack of services like training for guides, improved public infrastructure for tourists, and overcrowding or unplanned development for Siem Reap, the gateway to Angkor Wat, in a modern version of the tragedy of the commons.

Box 2.1: Perspectives on the Tourism Sector

Tourism by all means is no accident. Tourism is always planned with a clear view and expectation. It's not like we say we can't work when it's raining or the conditions of the weather. It's not like growing crops or fishing during specific seasons. In tourism we have precise visions and clear goals. First off, we must have a master plan and how it is incorporated to the job and environment. If we are not careful in how we preserve our environment we may not have a business anymore. (Travel Agency Owner 44)

I think that tourism seems a more solid driving force for the economy [than garments].²⁰ However, several problems occur: any reliable infrastructure has been properly established, the temples are gradually damaged by the massive tourists and so on. Let's take the example of water sanitation: the water distribution system is not credible enough in some parts of the city; they blend clean and dirty water. Someone has told me that if any case of cholera will be found in Siem Reap, no one will dare to come to visit Cambodia at least for ten years. In sum, tourism is a potential sector and important driving force for the economy, but the Government has to cautiously overview the development in this sector. They have a lot to do in term of infrastructure development, such as road or highway construction, sanitation measures, temple protection and maintenance, creation of museums and so on. Another critical issue that the government has to pay attention is the pollution of Siem Reap city itself by the mass of the tourists. (Member of Parliament 45)

²⁰ Ambassador (9) concurred that both garments and tourism are big successes, but is more confident about tourism's long-term prospects.

Worse than that, those tourists mostly bought their tour package from Hong Kong, Singapore, Thailand, so that they spend very little in Cambodia. The rest of the money goes into the account of the foreign travel agencies and the foreign airline companies as well. (Sister of Member of Parliament 46)

Tourism is good. The three cities important are where opportunity, Phnom Penh, Siem Reap, and Sihanoukville. The government has many plans but doesn't have any idea of taking precious things like Angkor that will give you long-term revenue. This is happening in Sihanoukville and other parts of the country. If we don't manage it well, we will destroy it. It only takes a couple of incidents such as cholera or a plane crash in Siem Reap. I think they're doing it but as you know the government is slow in policy and action. It's not certain in how to do it. (Entrepreneur and former Secretary of State 47)

[My uncle] won't register the massage parlour which makes more than the hotel in revenues because it would draw too much attention. [He] pays taxes of a few hundred dollars on gross hotel revenues of sometimes \$100,000 per month. Just has to make sure tax officials are happy by giving them money and gifts (in any case much less than the \$10k that would be paid per month were 10% VAT applied). Estimated tax regime makes discretionary decisions like this possible. (Civil servant employee 48)

Source: Adapted from Ear (2008: 37-38).

The Livestock Sector and Poultry in Particular

In Cambodia, available sources have cited livestock as the most important source of cash income. In rural Cambodia, the livestock contributes to 19 percent of household income for the poorest 40 per cent of households, while 11 per cent for the wealthiest 20 per cent of households ... Two recent surveys have shown that 62 per cent of households hold bovines, 54-56 per cent hold pigs, and 74-75 per cent hold household poultry (Ifft 2005: 2)

In 2006, agriculture held 34 per cent of GDP, a decreasing share due to continued growth in garments and tourism. However, 80 per cent of Cambodians live in rural areas and depend on agriculture. Livestock accounts for about a third of agricultural GDP in Cambodia. The population of cattle and buffaloes is approximately 2.5 million as is the number of farming families in the country (Food and Agriculture Organization (FAO) 2007: 30), and Cambodia is one of the few countries in the region with excess supply of livestock: cattle, pigs, and poultry. The demand for meat is growing rapidly in Southeast Asia, with the majority of large ruminant livestock in Cambodia held by small village producers and up to 25 per cent of cattle currently exported, an opportunity to increase production and address rural poverty exists.

There is a consensus that the development of agriculture and agro-processing are key for Cambodia's survival in the global economy (Godfrey 2003; World Bank 2004; IMF 2004; RGC 2004; Sciaroni 2004; NGO Forum 2002) following the end of the preferential quotas for the export of garments to the United States and the European Union, which had made that industry Cambodia's largest foreign exchange earner. The livestock sector has considerable potential if tapped properly,²¹ as farming continues to shift

²¹ In 2005, the Ministry of Agriculture, Forestry, and Fisheries listed livestock as the No. 1 priority in four provinces (Svay Rieng, Preah Vihear, Kampot, and Kampong Thom), No. 2 priority in 10 provinces, and No. 3 in six provinces, livestock is not among the 19 priority exports for Cambodia.

from subsistence to commercial agriculture over the next decade. While food security was the basis of agricultural development in the past, both donors and the authorities now realise that marketing and processing agricultural surplus is the next frontier.

Most of the 2.5 million farming families in Cambodia have some livestock: 'Poorer families, many of which are food insecure, only having a few breeding chickens and a fattening pig with no cattle or buffaloes. The overall average livestock per family is 1.6 cattle/buffaloes, 1.2 pigs, and about 10 chickens' (FAO 2007: 30). Collective action is similarly difficult in a post-Khmer Rouge environment that still reels from anything cooperative, much less communal (Ear 2005).

With the notable exception of Development Alternatives Inc., a grantee of USAID that helped pig farmers put their plight on paper, thumbprint the petition, and transmit it the Chair of the Agriculture and Agro Industry Working Group of the Government Private Sector Forum and brought the issue to attention of Chan Sarun, Minister of Agriculture, Fisheries, and Forestry, donors are not sufficiently engaged in realising the potential of the livestock sector—as it is currently grouped among products with potential for trade promotion that have limited or no technical assistance (Advisor: 49). Yet at the same time, state capacity in the sector is weak (and maybe the role of the public sector is little defined in relation to the sector). On balance, the state has been a hindrance rather than an enabler for the livestock sector, primarily because no single producer of livestock can yet be a market-maker. Officials have made the transport and official export of cattle so onerous as to be impossible for Cambodia's only exporter of livestock, shuttering its doors. Interaction between external factors—the international regime and the competitive power of neighbouring countries—and domestic factors—have conspired to stunt the livestock sector.

There are circa 16 million poultry in Cambodia, more than 90 per cent of which are backyard chickens and ducks, making the structure of the industry overwhelmingly Type 4: backyard holders. Around 2 million village households raise backyard chickens numbering around 15 million heads. According the last poultry census (November 2004) by the Ministry of Agriculture, Forestry, and Fisheries (MAFF), there were (Sorn 2005):

- 52 layer commercial farms (total of 206,000 heads)
- 92 broiler commercial farms (total of 422,000 heads)
- 331 ducks commercial farms (total of 300,000 heads) / closely depending on the season.

Cambodia does not export poultry or poultry products. According to the World Bank's 2006 *Poverty Assessment* for Cambodia:

Within the livestock sub-sector, poultry and swine production have each grown at just over 2 per cent per annum, slightly higher than the rate of large ruminant production (1.7 per cent). In value terms, poultry is still the smallest of these three livestock activities, and an outbreak of avian influenza is unlikely to exert a large negative impact on overall growth of the sub-sector, although a pandemic could exert a very negative impact on tourism. (World Bank 2006b: 59)

Start

SARS: A Wake-up Call

Any timeline must have a starting point, and while this one begins with Cambodia's first Avian Influenza outbreak detected in January 2004, a proper historical narrative would have to include at the very least the emergence of SARS as a precursor to the global policy response to HPAI H5N1. The SARS coronavirus caused a near pandemic between November 2002 and July 2003, with 8,273 known infected cases and 775 deaths (a case-fatality rate of 9.6 per cent) worldwide (WHO 2004). Twenty-eight countries and territories were affected within 10 months. This included most of Southeast Asia with the notable exception of Cambodia,²² Brunei, Myanmar, Laos, and Timor-Leste which had by then become independent (see Table 2.1 in Annex 1), and went well beyond Asia, involving the United States, Canada, Germany, the United Kingdom, Italy, and Sweden, among countries in the developed world.

As travellers were fearful that travel by plane would risk contagion, SARS and HPAI framed the downside of globalisation, worldwide travel, and the developing world's relationship to the developed world in a new context. Indeed, the only other time a drop in visitor arrivals took place since 1993 was in 1997, the year fighting broke out in Phnom Penh and the First Prime Minister was deposed.

SARS became a rallying call for what to do about places like Cambodia, where the health infrastructure system, destroyed by decades of war and plagued by corruption, could barely function. SARS was only a test, a test of Cambodia's emergency response system, while HPAI became the real emergency.

Enter Highly Pathogenic Avian Influenza

By December 2003, HPAI had already infected both Thailand and Vietnam. It was a matter of time that, through cross-border trade (much of which remains unofficial), the disease would reach Cambodia. As explained in Ear (2005), the policy process in Cambodia is opaque and not based on a rational-legal framework. Some policies are the result of direct foreign intervention, where donors play an important role. However, there are limits - as in the 15 year-old case of the draft anti-corruption law. No matter how many promises have been made, none has been kept concerning passage of that law. For the most part, policies are achieved through a complex network of governing party officials and patron-client relations.

Aside from the standard concerns for its own image as a tourist Mecca and overall public health concerns which affect not only the poor but the rich, one of Cambodia's motivations to work on HPAI control, despite the relatively small number of cases in animals and humans, was to capture a slice of donor contributions to the region, and because of the country's historical aid-dependence, international organisations and agencies were able to partly influence policy and agenda setting — but only up to a certain point. It was at compensation that Cambodia drew the line. Typically, the driving force can be direct benefits of some sort to important ministries,²³ such as the Ministry of Interior which controls the

²² While SARS was not detected, it was not for want of looking. 'New SARS-like Mystery illness in Cambodia' announced Associated Press (2003).

²³ Reacting to a more recent ban of pig, chicken, and duck imports from neighbouring countries in July 2007, an anonymous commentator had the following provocative reaction (edited for spelling errors and with identifiers removed) to a Senior official: 'When [he] is saying 'Ban Ban' there are more monies coming to him. This is how

police, and in particular the economic police, as well as other ministries like Commerce, and, of course, Agriculture, Fisheries, and Forestry.

Middle

HPAI Control Activities

Anticipating as much, the Cambodian government temporarily banned the import of birds and poultry eggs from neighbouring Thailand and Vietnam on 13 January 2004. Within 10 days, Cambodia detected its first outbreak of Avian Influenza on a farm outside Phnom Penh. At least 3,000 chickens were reported to have died in at least three farms near Phnom Penh; two days later, 10,000 chickens were culled. On 22 January 2004 – the Prime Minister issued a Prakas (Ministerial Declaration) on the creation of a national inter-ministerial committee on AI. It would be this committee that would deliberate important issues such as compensation and vaccination. While it is unclear how or when the decision was made — no record of a decision actually exists — Government Official (33) claimed that the Prime Minister decided that Cambodia would not adopt a compensation policy in what can only be called a ‘non-decision decision’, and this is reflected by a letter from one minister to another stating that the Government had, as a matter of practice, no policy of compensation.

Thus was framed the first important narrative in Cambodia’s HPAI policy process, one that is discussed in greater detail in Section 3.1. A rational-legal framework would have called upon a decision to compensate given difficulties in working only with a stick (culling) and no carrot (compensation). As Scoones and Forster (2008) explain in a regional context:

For those framing the problem as an emergency – and focusing on pandemic threat to humans – mass culling of chickens is seen as a necessary evil, which if compensated for, offers a substantial public good benefit. But looked at from the perspective of those whose livelihoods at least in part depend on these poultry, such an intervention can be catastrophic. Clearly the impacts will depend on where it happens and the alternative sources of income which might be available. Banning backyard birds in Thailand, say, has less of an impact, and causes less of an uproar than it does in Vietnam or Cambodia where economic and livelihood contexts are different. (Scoones and Forster 2008: 41)

It was not for want of international pressure on Cambodia to adopt a compensation policy. As will be detailed in Section 3.1, David Nabarro, the Senior UN System Coordinator for Avian and Human Influenza at United Nations Headquarters in New York (on secondment from the World Health Organization), Douglas Gardner, the UN Resident Coordinator and United Nations Development Programme Resident Representative to Cambodia, and Michael O’Leary, the WHO Representative to Cambodia, among others all raised the issue. Minutes of AI Partnership Meetings show a recurring refrain through much of 2006, but by then it was too late. The non-decision decision was justified as *pre-existing* government policy *not* to compensate for culling because no such policy existed. Authorities’ experience with guns for cash, a disarmament program, had taught them that to give money as an inducement would be corrupting. The guns were recycled for more cash. The fear was of false reporting, cheating, or sick birds from Vietnam brought across the border to obtain compensation in Cambodia (Government Official 41). Because

Cambodia has been operated since 1993 under [him]. [He] is indeed needing monies every day to pay his 4000 bodyguards ... But in Cambodia under [him], all ministers have to be dummy if not [he] will remove within 24 hours.’ (Anonymous 2007)

compensation is such a convoluted issue at least three reasons summarise its avoidance: i) heavy fiscal burden, ii) sour past experiences, and iii) logistically complex to implement.

From Animal to Human Health

It would not be until a year later, in January 2005, that the focus would shift from animal health to human health when Cambodia's first victim was discovered by a Vietnamese hospital on 30 January 2005. The woman had sought medical help in Vietnam on January 27. The following month, Cambodia once again banned the import of live birds and eggs from neighbouring Vietnam and Thailand. This cycle of outbreaks,²⁴ victims, and bans, would continue on for another two years. In total, 22 outbreaks (see Table 2.4 and Map 2.1) were confirmed from January 2004 until June 2007, without any having been found since then. Annex 2 content analyses nearly 160 Avian Influenza Bulletins published from 10 May 2005 until 18 July 2008. Coincidentally, it is in May 2005 that the Ministry of Agriculture, Forestry, and Fisheries issued a Prakas to establish multi-sectoral committees in every province for the control of AI.

²⁴ Although not discussed except here, the role of intensive poultry production is often suspected as a source of AI outbreaks. Charoen Pokphand (CP) Cambodia, a unit of Thailand's largest agricultural conglomerate Charoen Pokphand Group denied in September 2004 that it was involved in any way, although its breeders were vaccinated against AI. The company's president Sakol Cheewakoseg said 'C.P. Cambodia didn't cause the deadly virus spread in Cambodia since it has taken strict preventive measures in its farm' (as quoted in Yahoo Finance, 2004). His comment came after media reports that C.P. Cambodia may have caused the spread. A farm near the Cambodian capital was closed after about 2,300 chickens died of bird flu.

Table 2.4: H5N1 Animal Outbreaks in Cambodia 2004-2007

No.	Outbreak Date	Village	Commune	District	Pro	Number of Poultry Died						Cull	Total	Measure	Result	Prakas
						Chick	Duck	Geese	Turkey	Guinea Fowl	Wild Bird					
1	12.01.04	Pong Peay	PP Thmei	Russeikeo	PP	3300	0	0	0	0	0	0	3300	23.01.04	23.01.04	23.01.04/19
2	14.01.04	Tamao Zoo**		Bati	TK	0	0	0	0	0	86	0	86	06.02.04	06.02.04	11.02.04/67
3	16.01.04	Beng Chhuk	Kilometer 6	Russeikeo	PP	10	13	11	0	0	0	9	43	03.02.04	31.01.04	11.02.04/67
4	25.01.04	Prek Tom	Kbal Koh	Kien Svay	KD	50	18	9	70	65	0	53	265	27.01.04	05.02.04	26.02.04/79
5	28.01.04	Beng Don Pa	Slor Kram	Siem Reap	SR	7	0	0	0	0	0	0	7	27.01.04	05.02.04	26.02.04/79
6	06.02.04	Snor	Roka Knong	Don Keo	TK	1690	0	0	0	0	0	1510	3200	06.02.04	03.03.04	12.03.04/102
7	09.02.04	Prek Samrong	Takhmao	Takhmao	KD	1700	0	0	0	0	0	800	2500	11.02.04	18.02.04	05.03.04/94
8	11.02.04	Wat Bo	Sala Kamrek	Siem Reap	SR	3	0	0	0	0	0	620	623	26.20.04	03.03.04	05.03.04/94
	11.02.04	Chong Kaosu	Slor Kram	Siem Reap	SR	5	0	0	0	0	0	0	5	26.20.05	03.03.04	
	11.02.04	Trang	Slor Kram	Siem Reap	SR	0	0	0	0	0	2	0	2	26.20.06	03.03.04	
9	13.02.04	Robos Angkagn	Prek Thmey	Kien Svay	KD	167	0	0	0	0	0	2533	2700	13.02.04	03.03.04	12.03.04/102
10	21.02.04	Trapang Lbem	Sre Rornong	Tram Kak	TK	0	900	0	0	0	0	600	1500	23.20.04	03.03.04	12.03.04/102
11	24.03.04	Kab Nim	Chhumrah Pen	Samrong	TK	17	0	0	0	0	0	3	20	25.03.04	02.04.04	09.04.04/136
12	27.03.04	Village 6	Koh Samrong	Kampong Siem	KC	3	0	0	0	0	0	0	3	27.03.04	02.04.04	09.02.04/136
13	19.09.04	Veal Sbov	Veal Sbov	Kien Svay	KD	4200	0	0	0	0	0	360	4560	27.03.04	21.09.04	21.09.04/302
14	01.02.05	Kapue Ha	Prek Russey	Takhmao	KD	70	0	0	0	0	0	35	105	02.02.05	04.02.05	04.02.05/620
15	23.03.05	Keatha Vong Lue	Trapang Sala Khanglech	BanTeay Meas	KP	19	0	0	0	0	0	139	158	23.03.05	25.03.05	25.03.05/1550
16	22.03.06	Kamakor	Samlagn	Ankor Chheay	KP	36	40	0	0	0	0	171	247	29.03.06	28.03.06	28.03.06/126
17	23.03.06	Toul Prich	Moha Russey	Kong Pisey	KSp	335	72	0	0	0	0	200	607	23.03.06	29.03.06	30.03.06/132
18	02.08.06	Toka Chhour Timouy	Bateay Chakrey	Phreah Sdach	PV	0	1202	0	0	0	0	398	1600	09.08.06	11.08.06	11.08.06/337
19	13.08.06	Tang Krang	Chealea	Batheay	KC	0	1390	0	0	0	0	698	2088	14.08.06	17.08.06	17.08.06/349
20	12.08.06	Chong Ankrang	Soung	Tbong Khmom	KC	0	2295	0	0	0	0	115	2410	12.08.06	17.08.06	17.08.06/349
21	25.08.06	Balang	Sambo	Batheay	KC	0	484	0	0	0	0	331	815	28.08.06	17.08.06	01.09.06/359
22	06.04.07	Lhork	Krek	Pogneakrek	KC	292	10	0	0	0	0	938	1240	07.04.07	10.04.07	11.04.07/114
TOTAL						11904	6424	20	70	65	88	9513	28084			

Note: PP = Phnom Penh, TK = Takeo, KD = Kandal, SR = Siem Reap, KC = Kampong Cham, KP = Kampot, KSp = Kampong Speu, PV = Prey Veng

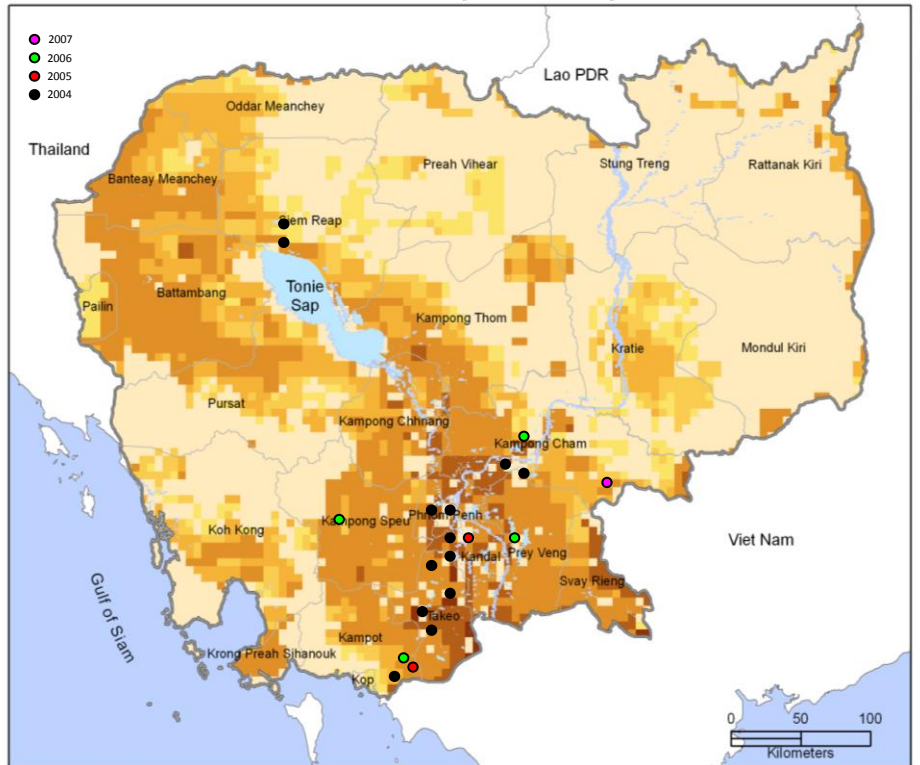
18	25.01.06*	Beung Thom Lake				KC		xxx
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Note: Martin Gilbert, WCS also reported H5N1 isolated by IPC from several duck flocks in Beung Thom lake on Jan 25, 2006 but with no associated mortality/morbidity.

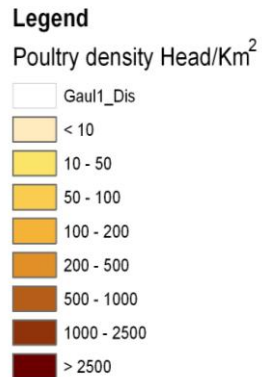
** Phnom Tamao zoo - the birds involved were actually captive birds, not wild birds.

Source: FAO Cambodia (2007).

Map 2.1: H5N1 Animal Outbreaks 2004-2007



Seven Cambodian victims in total would die of H5N1. As can be seen from the earlier HPAI Table 2.4, the animal outbreak is discovered *after* the victim herself, causing the Ministry of Health to embarrass MAFF for its inability to detect the infection first. Although this was a minor spat that only bruised feelings, it frames the bureaucratic politics of a second narrative discussed in Section 3.2 about the intra-governmental rivalries and jealousies that would arise due to competition (which ministry got how much money), roles and responsibilities (which ministry was not invited at the national level in a provincial pandemic preparedness simulation). While it should be recognized that social wellbeing (human health) partly drives animal health issues and funding, Cambodia’s AI experience laid bare the difficulty of inter-ministerial collaboration, especially between MoH and MAFF. Quarrels, rivalries and competition between political parties, ministries and departments are not uncommon, but this invariably hampers collaboration and success. This constitutes a major component of institutional failure coupled with the lack of in-country qualified human resources.



End

Enter ‘Super Moan’ and Pandemic Preparedness

Because the response to AI is mainly human-led, Behaviour Change Communication (BCC) came into increasing focus. At the 4-6 November 2006 Water Festival in Cambodia, the USAID-funded American NGO, Academy for Educational Development (AED), introduced a ‘SuperHero’ to increase public awareness of the ‘hows’ to prevent AI from appearing and spreading. Developed

during an AED workshop with Cambodian government officials, 'Super Moan' is a 'broad-breasted rooster with a familiar red cape and strong opinions about healthy behaviours' (AED 2007). The emphasis BCC is with messages like fencing-in poultry and quarantine of new poultry to prevent transmission. 'The rooster first appeared in public service announcements, on posters, and in booklets' (ibid); later he becomes animated in costumes for community theatre performances throughout the country and even is even introduced by the US Ambassador to the Minister of Agriculture, Forestry, and Fisheries (see Figure 2.1) and later meets the Prime Minister.

Figure 2.1: Super Moan



Note: From Left to Right, Super Moan (Chicken), H.E. Excellency Meas Kimsuvaro (Under Secretary of State, MAFF), H.E. Dr. Chan Sarun (MAFF Minister), Dr. Kimiko Uno (FAO Representative) and Ambassador Mussomeli pose for a photo with Super Chicken and a decontamination suit model during the USAID donation of Personnel protective equipments hand-over ceremony in Phnom Penh, 17 May 2007. USAID donated 4,500 set of bird flu protection equipment to MAFF.

Source: US Embassy (2007)

Strongly associated with the United States because of USAID funding, Super Moan is simultaneously exported to Laos as 'Super Kai' and becomes part of the global AI landscape.

As has become apparent, while the line ministries fight over who should have discovered what first, the issue of Pandemic Preparedness builds momentum. This is driven primarily by the fact that up until this point, Cambodia does not have a plan for Avian and Human Influenza, although it has separate plans for animal health and human health, these are not coordinated with one another.²⁵ In July 2007, the 'National Comprehensive Avian and Human Influenza Plan' is released with a foreword dated 5 July 2007 by the Prime Minister. In it, he writes 'A human influenza pandemic is inevitable.' (Royal Government of Cambodia (RGC) 2007: 1). He ends as follows: 'Strong leadership, organisation and co-ordination, and clear lines of accountability and communication will be key in pandemic preparedness and response' adding 'The Royal Government of Cambodia respectfully calls upon all relevant national and international partners to play their part in together overcoming the threats of the influenza Pandemic.' (ibid)

It is at this time that three taskforces were created by the authorities: (1) Investigation; (2) Information; and (3) Culling and Disposal. Taskforces (1) and (3) are not detailed to any extent in this study, however (2) Information is believed to be the Information, Education, and Communication committee that met twice as of May 2008, and nominally controlled the 'message' that would be transmitted. In fact, WHO, FAO, and UNICEF had held an 'ad hoc meeting' on 14-16 March 2006, 16 months prior to the release of the government's AHI Plan to identify priority behaviours (see Figure 1 in Annex 2) to control AI. The timing serves to underscore the international community's deep involvement in Cambodia, another important theme that will emerge in Cambodia's AI narrative.

Last Act: How Avian Influenza Helped Domestic Pig Producers ... for Seven Months

Returning to government-led HPAI control activities, it is known that the last ban on pigs, chickens and ducks from neighbouring countries was announced by the Prime Minister on 1 July 2007 during celebrations for Fisheries Day. According to a news account, the Prime Minister's reasoning was as follows:

(1) to prevent the safety threat on people from bird flu contagion which is spreading in several countries in the area, as well as in the world; and (2) if such import is allowed into Cambodia, our people can no longer raise domestic animals [due to foreign competition], and that it is impossible to know what kind of other diseases will be imported and spread to our population, because, now, our people no longer eat to just fill their stomach, they also want good and healthy food. (Everyday.com.kh 2007)

The pretext of the ban was control of Avian Influenza, but in reality, it had more to do with rents. The announcement came shortly after a Government-Private Sector Forum meeting at which a group of domestic pig producers had stamped their thumbs to a petition requesting a ban (see

²⁵ Desvaux (2005: 20) noted 'Cambodia did not have a strategy paper for AI, but the DAHP planned to pursue the activities related to AI surveillance and the poultry movement control ... Consultation for preparation of a new AI national strategy. Within the DAHP, the director Mr Kao Phal, the deputy directors Mr. Sen Sovann and Soun Sothoeun and the AI project coordinator, Mr. Sorn San, were consulted before a draft was submitted to the Secretary of State in charge of Animal Health and Production HE Yim Voeunthan. The draft strategy was also based on the outputs of the last inter-ministerial committee hold at the MAFF on the 10 May 2005. This committee, hold for the first time on the 23 February 2004, is chaired by the Ministry of Agriculture, co-chaired by Ministry of Health and is composed of representatives of Ministry of Finance and Interior, Governors, Directors of provincial agriculture offices.'

Box 2.2). The ban was put to paper on 13 August and fairly effective (banning anything in Cambodia is a matter of degrees, not absolutes) because pig producers in Cambodia were actually able to make money whereas before they could not prior to the ban.

Box 2.2: Cambodia's Last Ban: How the Threat of AI Helped Domestic Pig Producers for Seven Months

Because of disease problems in Vietnam, pigs were coming over at way below cost. Over a period of several months, a team working with an NGO...did a meeting and took notes, listened to what they said and wrote a paper and stamped their thumbs. They took it to [Neak Oknha] Mong Reththy, he takes it to [MAFF Minister] Chan Sarun who says wow, this is hot issue, he takes it to [Prime Minister] Hun Sen. During the seven months, he worked out the deals to stop pig imports and allow domestic production to flourish. (NGO representatives 42 & 43)

The development of a livestock sector in Cambodia presents a big opportunity in the agriculture sector. Livestock including cattle and pig attract large domestic and international markets. The pig raising sector is one sector in particular that can grow rapidly in Cambodia. However, despite domestic demand, the pig sector has been undermined by the smuggling of pigs across the borders. This issue has to be discussed in the Agriculture & Agro Industry Working Group [of the GPSF] and has received a lot of support from the Minister, H.E. Chan Sarun. H.E. Chan Sarun acknowledged that there were problems with smuggling and recognized that the illegal imports of pigs to Cambodia were a threat to the health of the population. In responding to this issue the Government recently issued an *'Instruction Number 001 August 13th 2007 On the Prevention of Importing Meat and Live Pig from Other Countries.'* The private sector appreciates the Prime Minister's response and support for this issue. If the smuggling can be stopped the private sector will be able to develop a viable livestock industry that would include farms and world standard slaughterhouse facilities that will also contribute to the health and well being of Cambodians. (Neak Oknha Mong Reththy) (Mong 2007)

Cambodian pig farming is increasingly changing from a family-owned business to big agricultural business. This has led some to worry about the health of eating pork, but now farmers in this emerging sector are facing a new problem: the lifting of a government ban on the import of pigs. Most farmers say that if they provide food they make themselves, it takes a lot of time to grow a pig, and even then the pig won't be that big, after eight months. If, however, a pig is raised with food additives in a pig yard, farmers see large, 100-kilogram pigs in just five or six months. Until the government lifted the import ban last week [late March 2008], these farmers were enjoying a boon in prices, and in pig size, two months sooner than they were used to. Now, many farmers say they are exasperated and may leave the trade altogether. (Ros 2008)

Source: Author's interview except when footnoted.

As the above stylized chronology reveals, the role of donors; the economy and the risks to tourism; and the role of media in framing risks and scares, were all important in shaping how Cambodia and the world reacted to HPAI. It does leave several critical questions unanswered, for example: How did Cambodia react to the threat of HPAI given its economy and the importance of its tourism industry? What was the role of donors and what did they do with respect to HPAI, given media risk framings of HPAI? How did poverty and livelihoods fit into the grand scheme of things? These are questions which the next section, on Policy Narratives, attempts to elucidate.

3. POLICY NARRATIVES

In any telling of a story, different versions can emerge. Telling a story is what narrative is about, and forces us to ask what competing storylines exist and what silences narratives? Thus, while Section 2 drew a picture of a country grappling with Avian Influenza from animal health in 2004 to human health in 2005, Information, Education, and Communication messages in 2006, and a 'plan' in 2007, offering a rough timeline of events, those in the thick of the action and present in the weeks and months prior to the first outbreak, during, and afterwards remember with perfect recall those tumultuous times. As a Government Official (41) reminisced:

Oh yeah, at that time Vietnam was facing problem about this bird flu. And I heard about this issue in Thailand in November 2003. At that time we didn't hear yet from Hong Kong. In Cambodia, I found a case and reported to the Minister of Agriculture on 6 January 2004. There was a problem importing chicken from Thailand, from a farm that had problems with bird flu. The farm tried to hide this information. We then postponed importation of birds from Thailand. In Vietnam, they announced this since early January (9th). For us, we announced this quite late, late January (23rd). Then we followed up the case: chicken had already been imported from Thailand. In 20th February, I ate chicken. The problem with bird flu is about market. We made owners who raise chickens lose money, so we lost market. If the government had a policy on this, this information would have been spread faster. I made a presentation during roundtable meeting. I have all the documents. *We found the issue even before Thailand and Vietnam, but because we had a poor broadcasting system, this information spread more slowly.* [Emphasis added]

Although this informant's account cannot be independently verified, he has been personally known to the author since 2004 and is deeply engaged in livestock policy in Cambodia. The account—one man's personal testimony—is probably as close to a ringside seat in the early days of the first outbreak of AI in Cambodia as one can hope to find. While there can be any multitude of narratives, three rose to particularly prominence because of their recurrence in discussions with informants and as result of findings in the survey administered for this study: (1) culling without compensation; (2) the shift to health; and (3) the role of poverty and livelihoods.

Narrative 1: Cull without Compensation

From the onset of the first AI outbreak in poultry on 23 January 2004, no decision regarding compensation for culling poultry surfaced as was apparent in a 2005 report by Vétérinaires Sans Frontières for FAO entitled 'Review of the poultry production and assessment of the socio-economic impact of the highly pathogenic avian influenza epidemic in Cambodia' which noted that 'providing financial compensation to producers officially HPAI-infected (to compensate for their losses and to encourage disease reporting by producers in the future)' (VSF 2005: 2) was urgently needed. More to the point, in the 10th weekly (currently in its 160+ issue) 'Bulletin on Avian Influenza in Cambodia' published by FAO and WHO Representations in Cambodia on 12 July 2005, under 'Country situation: Animal Health' a short paragraph appears that would otherwise be forgotten by mere perusal:

H.E. Chan Sarun, Minister of Agriculture, Forestry and Fisheries, sent a letter on Monday 4 July [2005] to H.E. Lu Lay Sreng, Deputy Prime Minister and Minister of Rural Development, in response to his request in exploring the possibility of funding compensation for poultry culling in Kampot Province. *H.E. Chan Sarun clearly explained that MAFF/RGC's policy does not allow to pay [sic] compensation to the farmers.* [Emphasis added] (FAO and WHO 2005: 1)

This laid bare the curious non-decision decision by the RGC to disallow compensation for culling of poultry.²⁶ Its mention in the *Bulletin* is important for two reasons: (1) it reports an exchange between two ministers of a government, one of whom belongs to Cambodian People's Party (Chan Sarun) responding to another belonging to the royalist Funcinpec Party (Lu Lay Sreng); (2) it is a minister (in rank) replying to a more senior (in rank) Deputy Prime Minister informing him of his Ministry's policy as well as, curiously, the Royal Government of Cambodia's policy. Moreover, it confirms that discussion regarding compensation had reached the highest levels of government, the Ministerial level and the Deputy Prime Ministerial level, and came to nothing. Recall that at this point, at least three confirmed deaths had taken place in Kampot, a fourth one—the first possible victim of AI—had been cremated by the time authorities discovered his sister who is speculated to have caught the disease while crying over her brother's body, thanks to the Vietnamese medical system.

In the Second 'Partnership Meeting on Avian and Pandemic Influenza' on 20 February 2006 hosted in United Nations Main Conference Room by then UN Resident Coordinator and UNDP Resident Representative to Cambodia, Douglas Gardner, the minutes under '4. The Beijing Pledging Conference - outcomes and next steps' suggest that donors had evolved from merely reporting the RGC's internal deliberations about compensation to demanding clarification on the issue of compensation to those authorities present at the meeting:

Mr. Gardner said ... compensation to farmers is key to containing the virus at the sites. A clarification of compensation policy is required.

Mr. Kao Phal, Director of Department of Animal Health and Production at the Ministry of Agriculture, Forestry and Fisheries said the Ministry has no compensation policy but is providing incentives to farmers with support from FAO. These include technical support to farmers to improve bio-security in the farm, provision of protective gear and equipment for culling, disposal of affected poultry and disinfection of poultry premises. To strengthen surveillance and early response, MAFF buys ducks from farmers to be studied. Communication materials have been distributed to farmers so they understand more about the disease. Training for village animal health workers is continuing providing some

²⁶ Health Expert (25): 'With the decisions from above that there should be no compensation, we do not know where it is from... is it from Hun Sen or the National Assembly? We do not know... there is no sub-decree or anything...' Donor Staff (32): 'Right, there is no compensation policy. Regarding AI issue, the Ministry of Agriculture was only in charge of spreading the Minister Council's announcement and has accordingly worked with the village and commune chiefs in order to help them to mobilize the opinion and Government decision. Consequently, the Ministry staffs jointly with the local authority explain to the concerned birds risers the huge impact and large scale effect of the epidemic. The ultimate solution is to eliminate all contaminated birds. Some villagers even tried to hide their poultries or killed them for food.'

1,900 with protective equipment, pump spray, disinfectant, gloves, masks, posters and small calendars with hotline numbers.²⁷

According to Ek (2006), Cambodia asked donors at that Beijing Pledging Conference earlier in January 2006 for \$32.5 million over three years in bird flu aid, but according to Megge Miller of the World Health Organisation office in Phnom Penh, the sum was too small to enable compensation for culling. Miller said that 'The recent cases have really highlighted that because there is no compensation, people are being ostracised from their communities and so we get no reports any more.' (Ek 2006) Around the same time, Yim Voeunthan, Secretary of State at the MAFF, said: 'Just recently, I heard the WHO plans to provide a budget to the government for paying compensation ... However, we cannot consider it official yet until the money is handed to us.' (Sam 2006) Miller responded that the budget for paying compensation, if any, would not come from WHO, but from international donors. Miller's boss WHO Representative, Michael O'Leary, announced that talks were on again to establish a compensation program, and added 'There is no new [compensation] policy, but I think there is an awareness that to not compensate farmers whose flocks were culled makes it difficult for them to come forward.'²⁸ Unfortunately, this 'awareness' did not materialise into a compensation policy.

Although not necessarily obvious from these accounts, from the very beginning, Cambodian authorities decided that there would be no compensation policy and therefore no compensation. This was the essence of the non-decision decision, and indeed, even researchers following the virus in Cambodia held out hope for a possible change in course for the government's 'no-compensation policy' when they published an article in January 2007's US-CDC's *Emerging Infectious Diseases* that concluded, rather critically, as follows:

We observed difficulties and frustrations among farmers whose flocks underwent culling after identification of H5N1 viruses in their flocks because compensation has not yet been approved by the government of Cambodia. In contrast, Thailand and Vietnam have introduced compensation along with the

²⁷ UNRC (2006: 3). Although the hotlines are not discussed to any extent in this report, they are a narrative unto themselves. While hotlines generally imply toll-free (costless calling), which donors wanted, authorities argued that this represented (a) an unfunded liability which they could not absorb going into the future and (b) was no longer allowed according to Cambodia's main mobile carrier, Mobitel (carrier 012, 092, etc.). Mobitel had made one exception in the past for an AIDS hotline, but it could not be induced to do it again, ever for reasons unclear. The toll-free 'workaround' is well-known in Cambodia. A caller initiates a call and hangs-up before the calls is picked-up. Known in Khmer as 'signo', it is a signal to the party called to call back using their phone's Caller ID feature. This relies on both parties understanding the system and is obviously not equivalent to toll-free calling as it requires persistence from the caller and a willingness to call back from the party called. Perhaps testing the system would be instructive. AI Expert (12): 'X said in several meetings that having the free hotline will be costly...donors willing to support it but he says what would happen once donor leaves, the government cannot support it. UNICEF has project on HIV/AIDS that has hotline, supported by MOBITEL. And MOBITEL is not willing to support this hotline by giving it a reduced rate on AI hotline.' Donor Staff (26b): 'I asked them as well. They said that was because of Mobitel, they didn't allow that free line.' Government Official (33): 'Mobitel does not collaborate. FAO, UNICEF, Ministry of Agriculture, we would like to have a single hotline, but Mobitel could not help us in this. And we need some online staff, such as village vets, health staff ... to do so, we need a lot of money. So, nowadays, we only give the staff US\$ 50 cellcard, we have two staff from Ministry of Agriculture, and two from Ministry of Health. This is not a hotline. We ask people to give call and hang-up after a ring or two (which costs them nothing), and then we call them back.'

²⁸ As quoted in Agence France Press (AFP) 2006. Rushton et al. (2005: 511) had concluded that Cambodia 'has made it very clear that compensation is not and will not be an option.'

introduction of poultry vaccination in Vietnam and the reduction of backyard poultry ownership in Thailand in an effort to protect the commercial poultry industry. Thus, it is difficult to envision effective control strategies in Cambodia based exclusively on culling. Coincidentally, Vietnam has reported far fewer H5N1 outbreaks in poultry and humans since the introduction of the vaccination program, while Cambodia detected 4 outbreak sites in domestic poultry and 2 unrelated human cases in 2006. The real effect of a no-compensation policy on willingness to report poultry deaths needs to be assessed. (Ly et al. 2007: 131)

What explains the reason for why the RGC chose *not* to compensate for culled birds (nor to vaccinate live ones²⁹)? Based on interviews with informants, it appears that the RGC did not wish to spend (and did not have) its own resources³⁰ nor to borrow or use donor resources for this purpose because: (1) it did not wish to repeat a costly mistake with a guns for cash program that had allegedly been abused;³¹ (2) it did not want an unfunded liability; and (3) it had concluded (whether credibly or not) that such compensation policies were ineffective elsewhere and would not work in Cambodia because of the logistical difficulties in implementing them. Box 3.1 details seven informant views on compensation and highlights just how much confusion still exists on the matter. Clearly, neighbouring countries' policies have not been made clear. Some thought Laos had a compensation policy, others did not. More clarity on what has been done elsewhere would be a first, useful step.

Box 3.1: Culling, Compensation, and Confusion

The Council of Ministers was consulting with relevant ministries. Majority went for compensation. The Minister of Agriculture called me in to ask about that as well and he asked me to call a meeting with donors. When I was about to call a meeting, I got an order from him that they changed their mind, now there will be no compensation. It was from the Prime Minister ... There are pros and cons. Advantage of this is that people will inform the case of bird flu on time, and people will get some money back to restart their business. But the disadvantages are more than advantage. When we compensate, people will put chickens with diseases into a group of chickens with no diseases. When we found a case of disease, we do not allow chicken flow in and out, we do not allow people to buy or sell chickens. So to get compensation, they make all the chicken sick and they will get the money. This is what happened in Thailand. Second reason

²⁹ AI Expert (12): 'Vaccination needs close monitor which cost lots of money.'

³⁰ Donor Staff (16): 'The government doesn't have any budget for that.' Veterinarian and Consultant (1): 'The big problem is animal health point of view. The problems come with: what is the problem with disease, what is bio-conclusive, and how do you define management? How are you going to find the answers? How often does this disease strike for AI? Everyone looked at this immediately from the point of view of the developed countries where they've got money. They've got money in bank legislation. Here because there is NO money and there is no monetary compensation. Without compensations people will not be rid of the disease ... The money that has been put towards the country should have been put away for compensation fund. That would have helped the market with a telephone card so they can report it...in hopes.... People capitalized their losses when the prices kept going down. No one wanted to report dead birds. So nothing really changed. No safety issues resolved. No compensation.'

³¹ AI Expert (14): 'The immediate kneejerk reaction with regards to firearms for cash. So that predicament was the reason for this problem. It was that incident where that went wrong. Need proper quarantine to be put in place. There is commitment to compensation but no commitment to monitor or police. Examples: Nigeria and Vietnam.'

is that, the compensation is not 100 per cent, and people could not get money immediately, so report will also be late. Compensation could not help improve report. I would like to share about compensation in Japan. They covered almost everything including 100 per cent chicken cost, transportation, and so on. That still, people did not report. When they found the case, they kill those chickens themselves. In Vietnam, Thailand, and Indonesia, compensation does not help much. Yes, Laos has compensation. Not much compensation, takes time to get money, people are also late in reporting. Mass killing- like investigate within 10 kilometer square- what they called radius, to prevent transmission. We can't do this in Cambodia. In Cambodia we have selected killing, and now they all follow us. Because farmers said they are so poor, and their chickens are not sick, why kill them? So, you see, no one can do it, it work only in theory. And another issue about compensation in Vietnam is corruption. It was in the news. Village vets that got compensations, transported ducks to Cambodia and get money again. So, I think our government does the right thing. But it doesn't mean that we do not compensate, for example, in Kampong Trach, Kampot, that farmer borrowed money from ACLEDA, 2,000,000 Riel to raise ducks. When those ducks got sick, we asked them to kill those ducks. They claimed for 500,000 Riel for compensation. We had money and we didn't want to take risk giving them. Anonymous Organization gave me money to buy those ducks. But I didn't do so. At that time, if we gave money to that farmer, there were many other farmers nearby who would ask for compensation as well when their ducks die. No, we can't [buy as a way to compensate]. If it happens when we investigate, we can do that. But when the case is disclosed, we can't. Our staff felt so pity about that farmer, but we could not give them money. I took his picture crying. When I return, I met the Minister. When he saw the picture, he said he will work that out. I heard he asked the Chief of Department of Agriculture in Kampot to visit that farmer and gave him money quietly. This is how we compensate. *Government Official (33)*

I read a document, I'm not sure who said that, but they said 'At some points, some people are compensated.' There is no compensation scheme at all. Our expert told us last year that we need to develop a compensation scheme otherwise people will not report. When half of my chickens died, what should be the reason to report you, so that you will come and kill the rest? And I got not a single cent in return? Also, the village vets won't go to visit people, to advise or give them any information, flyer about AI. They only visit household when people ask them to give vaccination for their animals, then they will get paid. We all have many ideas about that but not sure if it works. ...So far, we find out the case of AI only after a person died. In the future we will face a pandemic if we can't control this. We need an incentive scheme. *AI Expert (7)*

I heard about that story. When the officials visited, and the farmer cried for losing all their birds. They could not do anything, so that they talked to the Minister and they came back to give money to that farmer silently. *AI Expert (6)*

I used to work with animal vets and Mr. X, and I asked them this question, he responded that the government doesn't want to spend money on this. I also asked them why the government did not use vaccination. He responded that in Indonesia, they have policies, the compensation and vaccination, and they still not able to control the pandemic. I think what he mean was that if the policy does not work, why do we need to spend money on that. But I think the government does not need to use their money, there are plenty of donors who are interested in this and we can use that money from donors. *Donor Staff (26b)*

Corruption should not be the only issue to blame in this matter. Market should be the issue that we need to deal with. Even if we compensate, without solving market issue, we can't have success. Chicken is not like other products. When we stop chicken from being sold at the

market, the owners need to feed chicken everyday, looking forward to selling those chicken one day. To avoid losing profit, owners would choose to sell chicken early before the official ban. Also, to compensate, owners need to pay to burn all those chicken. The owners would not take risk in this, if they don't get compensated, then they will lose. And there are so many other reasons including commercial policy. FAO accepted my initiative about "restock" ... this is win/win solution. The solution is to take good species from other areas and to train people to raise that species. This project no matter how much money we spend, ten or a hundred million dollar, it doesn't matter, because this contributes to poverty reduction in Cambodia. We win in a matter of diseases (animal diseases) control and we also win in a matter of poverty reduction. But the RGC doesn't want to do it. Things only happen if they wish to. This is politics. The solution we suggest should not only be a theory, but we need to prove it. Money from World Bank which totals about \$10 million, this money also goes to the Council of Ministers. I don't think this will benefit much. I saw plan from the Department and Ministry of Health about emergency preparedness. They talked about re-stock, and rehabilitation. We have never done any rehabilitation, but bird flu ended by itself. We didn't do anything about it. But the thing is that, even bird flu ended, it is always possible that it happens again. So we have to be well-prepared. If we can do so, we will save lots of money, from the fact that market is not being ruined, people have good awareness of the issues, and we can manage food supply well. *Government Official (41)*

Gov. says they have no budget to compensate people. They say to me, you have to go around and check. People don't want to report, because if they report, it destroys them. Private Sector (8)

People were happy with culling. They were not unhappy about being uncompensated. All they want is honesty from the government that there will be no compensation for culling. Government was not clear and not official. No vaccination has been done in Cambodia nor any compensation. They never reach the villagers because of corruption. Lots of donors want to help with compensation but the government doesn't want money. One reason could be that people would report more so that they can get the money. *AI Expert (12)*

Source: Author's interviews, see Table 1.1 in Annex 1.

Indeed, an FAO (2007b) evaluation of activities in Cambodia from 2002-2007 recommended, as had Government Official (41), that 'restocking of culled farms and compensation' (FAO 2007b: 31) be done. Yet until January 2006, 'the government was not ready to consider compensation for farmers whose poultry were culled, and there had been no progress on legislative support for disease control. The government had no plans to develop a vaccination programme.' (FAO 2007b: 32). Ek (2006) suggests that authorities were in fact practicing some restocking, although this clearly was not systematically instituted. He quotes Animal Health Department director Kao Phal as saying 'Compensation is not there, but we are trying to replace their sick chickens with healthy ones for new breeding. If we keeping [*sic*] paying out compensation, what will we do if big farms have all their poultry die?'³² In the same story, after a mass culling in Toul Prek, a village 30 miles west of Phnom Penh, 28-year-old Duch Yoeum, who lost 50 birds in the cull said, 'Next time, they won't be able to just come and cull my chickens if compensation is not settled first.' Indeed, as of 2008, when asked about restocking, Government Official (33) said 'We talked about that as well, but we don't have money for that. No [NGOs are not interested in this]. But I saw farmers re-stocking themselves.'

³² As quoted in Ek (2006). NGO Doctor (15): 'Yes, that's a lot of money. If they suppose to kill chickens in the whole commune where AI outbreak, the government would not able to afford that compensation.'

Noting the difficulties in administering a compensation scheme—a third reason for not compensating—David Nabarro said that for Cambodia, 'It's a question of ensuring that the government is comfortable about some of the challenges of administering a cash compensation scheme. These are not easy to administer, and governments need to feel confident they've got the right mechanisms to do so.' (Associated Press 2006)

Adding to the confusion of whether there was, in fact compensation, an AI outbreak in ducks in Kampong Cham was reported by Deutsche Presse-Agentur (DPA) (2006) to have led to compensation for culling: 'Chief of the Agricultural Department in Choeung Prey district, Son Sivon, ... said the government had paid farmers compensation for each bird before slaughtering the remainder of the flock and burying them.' (DPA 2006). Government Official (33), AI Experts (6) and (7) certainly echoed this with what they had heard happened in the case of secret compensation through the Minister of Agriculture, Fisheries, and Forestry.

Beyond the fog of AI compensation policy (or lack thereof) lays a realm of possible AI control activities. True to his background, a Health Expert (25) proposed experimenting with compensation in a controlled group versus intervention (compensated) group to see differences in reporting and effectiveness as detailed in Box 3.2.

Box 3.2: Compensation and Beyond

At rural area, if there is no compensation, people will not inform about their dead birds to the provincial or higher level. Now, the national and sub-national levels have not received enough information, unless the community is willing to provide it. In most cases, the communities do not want to inform [about dead chickens] as their income depends on their chickens and ducks. Plus, if some are sick, they just think it is a normal thing as since long time ago, chickens die when such season comes. But they forget that now there is bird flu thing. So when I go to community, I learn there are lots of birds die, and I ask why they don't report. They say, if they do, they will get their birds killed. But as with the government and donor policies, I am not very familiar with that... Such regulations [as compensation] have a much wider scope beyond the authority of a province or a ministry. Even the ministry is still too small for this matter. And the ministry is not the decision maker on where and how to allocate resources to solve the problem. Such a decision should be done at, say, the National Assembly... If there is no decision from such higher level, it cannot be implemented... Because in Cambodia, it is a tradition that there needs to be approval from the above first and then those at the lower level will follow... For example, when we developed 'Pandemic Planning,' we proposed a detailed plan from the lower level, submit it to the higher level, and when we get approval from the higher level, we can implement it effectively... So with the compensation issues, there need to be approval from the higher level, with of course some discussions with the lower. I think there needs to be a national law passed by the National Assembly... but before we can get to the National Assembly, someone needs to propose it... But on the bird flu issue, I think it should be the Ministry of Health, with some helps from CSO, who should propose. I think a pandemic might happen some time if the current situation still continues in Cambodia. If Cambodia has good surveillance system, we will find more cases of the AI, but we don't have such system. If we have enough information from communities, we might find more than seven cases of death... but unfortunately, we don't have reliable information... for instance, there are more deaths in rural areas especially among tribal people, but we can't make any conclusions because our information is not adequate as we do

not pay compensation... Another thing, when I go to meet communities, people say that there are 20-30 chickens die, they report to the districts, sometimes using the hot line, but they did not get any replies... I think we should conduct a pilot project. We might use compensation by government in some areas and not in some others and where NGOs can provide compensation. We then can see which areas produce better information. And if areas with compensation produce better information, then we can make suggestions to the government... The compensation of course needs not be 100 per cent. It might just be 25-50 per cent. Because we know dead chickens, not all of them need to be abandoned; some of them still can be cooked for their meals.... Also, there should be survey on people habits of cooking dead chickens and ducks so that we can provide appropriate compensation. *Health Expert (25)*

Can the donors do a pilot about compensation? No, I don't think this is a good way to do. It undermines the sovereignty of the partner state. *Donor Management (26a)*

We need to have regional measures. We need to look at security policy. We can't do this because our poor people are dependent on this resource. If we do so, we can't cope with disease, but this is not practical, because people need this to live. ASEAN stopped talking about this and then they began to talk about bio-security which is about fencing (organic, farming system), cleaning (hands and environment surrounding), using mask... all about protection. We covered almost 90 per cent. We have standard, legislative (sub decree 26). These are two lessons learned about responses to AI. This is appropriate for Cambodia since we have sufficient livestock. In VN, they talked about vaccination. Vaccination is good but accessing vaccination is a problem. *Government Official (41)*

For us, no, but for them they will profit, because in Vietnam, they didn't compensate. The issue with AI is serious; I tried to convince everyone including FAO to support in this. But the problem is with our community. They are not ready. We educate them about sanitation to prevent AI while none of them have even see AI, this is difficult to convince them. The only way to convince them is to talk about economic, for example, suggesting them that if do so, you will get profit from it. Donors are interested in AI but communities don't. They only think their chicken, and not disease. Only economic could attract them to be ready to tackle AI. *NGO Management (29)*

In Cambodia income is low, so without compensation, people will not report outbreaks. We have raised this a few times with the government, but there was no response. In Thailand, they compensate. Nowadays, there is only one message that we use for scaring people. We asked people: do you want to survive or kill your sick chickens? People have low education and low income, so, no matter how hard work we put on to raise awareness of people on this, people will not follow. I'm not sure. But I think they want to scare people because our people do not think much about the future, they only care about present. That's why we are very careful when giving message to communities. *NGO Staff (37)*

I think they should pay a certain percentage. I think policy makers within the Ministry of Agriculture should think about this. We are NGOs; we also have this question, because this will affect socio-economic income. I think our government does not care about the loss of the people. For example, building road, the Asian Development Bank always has a budget line for compensating the impact of that road construction on the livelihoods of the people. If the government built that road, the people would not get any compensation ... Who cheated the system? I don't think the people do, I think the government officials themselves. *NGO and IO doctor (18)* Source: Author's interviews

Narrative 2: It's Health Now

As soon as a human victim was confirmed, the focus shifted to human health and the MoH. This had the effect of bringing into focus inevitable comparison and contrast between the Ministries (MoH and MAFF), and as earlier discussed set off a competition for resources as would be predicted in bureaucratic politics. Because animal surveillance was intended to warn of risks to humans, the discovery of the seventh human victim without any animal outbreaks detected created immediate tension between the ministries.³³ On 12 December 2008, an eighth victim, 19 year-old Seng Sopheak of Kandal Province was confirmed to have H5N1 when an unrelated systematic multi-size hospital-based study of the U.S. Naval Medical Research Unit No. 2's (NAMRU-2) happened to find the virus in his blood. Kandal adjoins Phnom Penh and is home to a large live animal way station/processing area in Ta Kmao. The infection is suspected to have taken place when Sopheak ate dead chicken during the Water Festival (Bonn Oum Touk) which took place on 11-13 November 2008. Once again, MAFF did not find the birds before MoH found the human victim, and this is likely to be perceived as a failure of animal surveillance. Moreover, with the July 2008 elections long passed, it may be safe to 'discover' Avian Influenza without political recriminations.

When the focus shifted to pandemic preparedness,³⁴ the National Committee for Disaster Management (NCDM)³⁵ entered the picture. Two themes emerge: (1) the more experienced MoH was seen as a viable implementer of donor funds while the MAFF was perceived as having less capacity and an unknown quantity at managing large donor resources; (2) NCDM—as the new kid on the block for AI—was only too happy to get any money at all, but it has had to tread carefully—a May 2008 pandemic simulation failed to involve MAFF at the national level, creating a storm in a teacup.

³³ AI Expert (12): 'There is no rivalry between FAO and WHO. Rivalry is between MOH and Ministry of Agriculture. They blame each other for something. For ex: last outbreak of the 7th death, MOH calls MOA and blames them for not knowing.' Government Official (33): 'Yes, because of that, the Minister of Agriculture blamed me. I don't think Ministry of Health or WHO work better than Ministry of Agriculture; they only found the case when people got to hospital. Usually, when a few chicken died, people never report, only when they ate and die, then they suspected. I think there could be more people have died of bird flue but the Ministry of Health doesn't know. The Ministry of Health didn't know this in advance, only after people died and we did the test, that we got to know that. Other countries, they were clear, they know for example, there are 90 people sick and 40 of them died. The Minister blamed me, that animals vet should got the information before human's doctor. How can we do that when human's doctor also don't know, only after people died. Village vets will report only when many chickens died. We tried to strengthen surveillance system, but the Ministry of Health should also strengthen this as well.'

³⁴ As an Embassy Staff (21) noted, 'AI is moving to respiratory disorders'.

³⁵ According to Khun (2002: 27-28), NCDM's Mission is to lead disaster management in the Kingdom of Cambodia. Its functions and responsibilities are: (1) To coordinate with the Ministries of the Royal Government, UN agencies, IOs, NGOs, International Communities, National Associations, and Local Donors in order to appeal for aid for Emergency Response and Rehabilitation; (2) To make recommendations to the Royal Government and issue principles, main policies and warnings on Disaster Preparedness and Management cum the measures for Emergency Response and interventions in evacuating people to haven; (3) To disseminate Disaster Management work to Communities and strengthen the line from the National level (Ministries / Institutions concerned) to the provincial/ Municipal/ District/ Precinct level along with human resource development aiming to manage Disaster works firmly and effectively; and (4) To put forward a proposal to the Royal Government on reserves, funds, fuel, means of working, equipment and human resources for Disaster Prevention and intervention in Emergency Response and Rehabilitation before, during, and after disaster.

In fact, the nexus between scientific risk and uncertainty in Cambodia is complicated by the fact that while awareness of AI and personal protection measures is high, according to Ly et al. (2007) 'most rural Cambodians still often practice at-risk poultry handling' and that 'Anecdotally ... family members of H5N1-infected patients, who knew about AI risks, still prepared dead or sick poultry for household consumption during massive die-offs, because they observed that neighbours with the same behaviour did not become sick' (Ly et al. 2007: 131). This gives a new dimension to 'neighbourhood effects'.³⁶ As CEDAC (2007: para. 10) notes, 'Particularly with the experiences of partial culling and involvement of children in the campaign, it is doubted that whether HPAI is really serious or not. Thus, not many rural people and poultry producers believe about the seriousness of HPAI' adding that 'It seems that they are not willing to collaborate with the technical departments and authorities to prevent HPAI outbreaks.' Not surprisingly, what Ly et al. conclude is that:

Behaviour change involves comprehensive and multidisciplinary intervention, which combines risk perception communication and feasible and practical recommendations, including economic considerations. We speculate that it is hardly feasible to sustain good poultry-handling practices if access to personal protective equipment is cost prohibitive, particularly when disease occurrence poultry die-offs are common. (Ly et al. 2007: 131)

Indeed, subsequent research by anthropologist Ben Hickler revealed that the indigenous taxonomy of poultry disease in Cambodia needs further consideration. Cambodians have long been aware of *dan kor kach*, the technical name for Newcastle disease, 'a seasonal sickness with heavy mortality, generally regarded as natural and harmless to humans (though harmful to livelihood)' (as summarised by Dy 2008). Indeed, the economic loss to farmers from Newcastle is only one of many diseases, 'not only HPAI, but other disease like cholera, fowl-pox also have similar economic impacts' (CENTDOR 2008: 56).

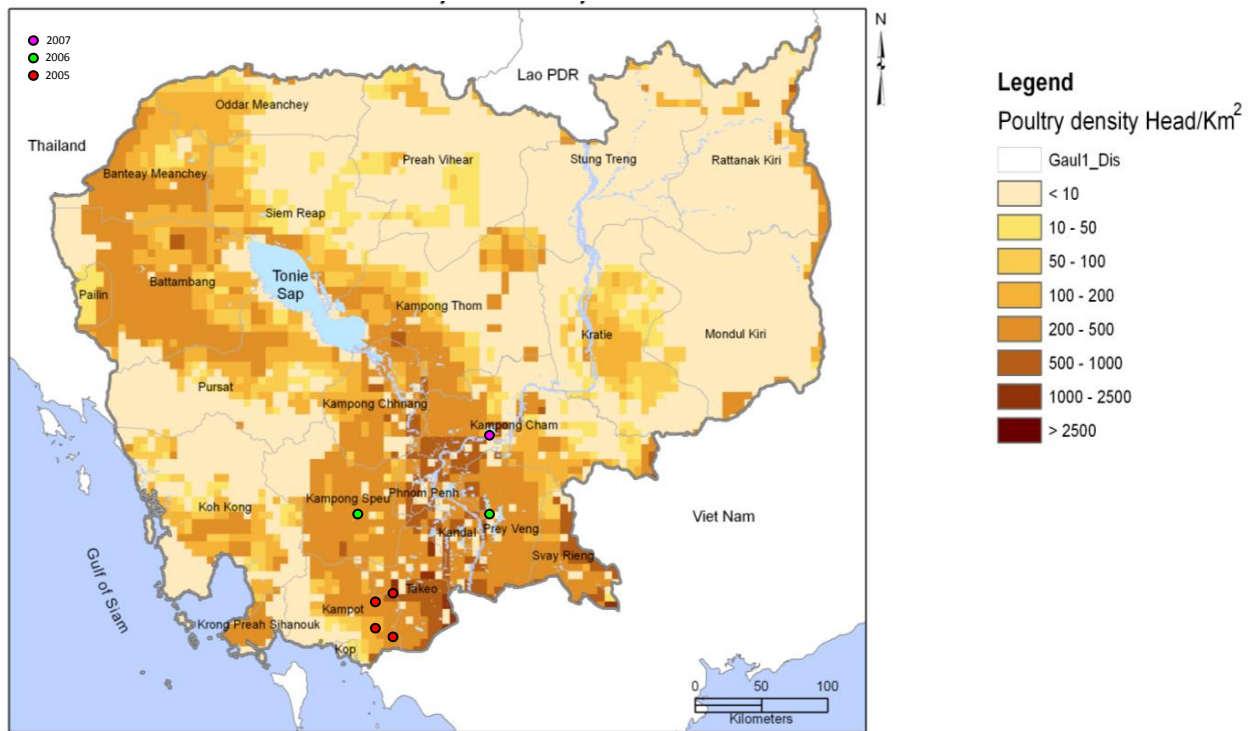
Dan kor kach 'is seen as impossible to prevent and difficult to treat. *Pdash sai back sey* (Avian Influenza) is a new term that is confused with *dan kor kach*' (Dy 2008). Hickler's report concludes that in order to be effective in terms of behavior change, HPAI communication strategies must monitor and manage both terms, *dan kor kach* and *pdash sai back sey* even if these 'may not be concordant with bio-scientific categories' (Hickler 2007: 30). One informant (Farmer 40) recalled raising poultry that would perennially suffer from *dan kor kach*, and was resigned to heavy losses, but never thought much of it. He attributes current difficulties in convincing farmers of the risk of HPAI as inextricably linked to Newcastle Disease.

On the one hand, AI's emergence has only confounded Cambodians used to dealing with *dan kor kach* in an environment in which they received little to no attention from donors, much less their own government. On the other hand, donors' 'overzealous' response to AI in comparison to an unprecedented dengue outbreak in 2007 caused outrage for Swiss pediatrician Beat Richner, the founder of several hospitals in Cambodia. Dengue claimed 407 lives (Khoun 2008) out of some 4,000 dengue fever cases, a death rate of 10 per cent, (Xinhua 2008) in comparison to AI's

³⁶ According to Dietz (2002: 539): 'Neighbourhood effects are community influences on individual social or economic outcomes. Examples include labour force activity, child outcomes, criminal behaviour, and other socioeconomic phenomena.'

single casualty in 2007, two casualties in 2006 (158 Dengue deaths), (Chinaview 2007) and four casualties in 2005 (at least 68 Dengue deaths). See Map 3.1 for year-by-year human casualties of AI. According to Richner, the additional cost for his Kantha Bopha Hospitals Foundation caused by the Dengue epidemic in 2006 was \$7 million (Richner 2007: 15) yet 'Neither a member of the International Community, not the WHO responsible on the Dengue Program, nor the Cambodian Government have made any gesture of financial contributions.' (ibid)

Map 3.1: Locations of Seven Human Avian Influenza Deaths in Cambodia



According to Ek (2007), 'raising cash is becoming harder because of Western preoccupation with diseases like bird flu', quoting Richner: 'Bird flu is a threat to the Western world, so they pour money and commitment into that ... But dengue? There's no threat to the United States or Europe so nobody's interested.' Box 3.3 is an extract of a full page ad Richner placed in the *Cambodia Daily*, Cambodia's largest English-daily newspaper, on 26 July 2006. He does this with some regularity, but this was his only known ad specifically raising AI. Other ads have consistently criticised what he characterises as the WHO's and other international organisations' policy and strategy for 'poor medicine for poor people in poor countries'.

Box 3.3: The Dengue Disaster: A Mirror of the Hypocrisy of the Health Policy for the Poor World

This year already 17 243 severe cases of Dengue were hospitalized in the four Kantha Bopha Hospitals, up to July 24th. (In 2006: 12 000 cases). 164 Dengue cases have died.
 ...
 For Kantha Bopha the additional cost caused by this year's Dengue Epidemic will be 7 Million USD. The average costs per case are 300 USD. Neither a member of the International

Community, not the WHO responsible on the Dengue Program, nor the Cambodian Government have made any gesture of financial contributions.

...

A night in February 2007 a severely sick child arrived in Kantha Bopha from Kampong Cham Province, having been treated as typhus there three days in a so called private clinic. (Not in a health center as it was reported). Arrived in Kantha Bopha, the same night the clinical diagnosis Bird Flu was made thanks to the sophisticated facilities, thanks to the fact, that Kantha Bopha is free. The family was poor, it has lost all their poor money in the so called private clinic. If they should pay, they would not have been traveled to Kantha Bopha.....and nobody would be aware of the Bird Flu at the Vietnamese Border in Kampong Cham Province. The child has died the same night. The next day WHO, experts and others were traveling to the child's home next to the Vietnamese border in order to neutralize the area from Bird Flu. *That is ok!* But to the homes of the Dengue cases nobody is traveling to. Since ever we give the addresses of the homes of all Dengue cases to the Ministry of Health, so we did it in November 2006, when the Epidemic started in Kampong Tom Province, Stung District.

But nobody was traveling to the place. *Why this difference?* The Bird Flu is a threat for the western world, so there is money and commitment. The Dengue is "only" a most severe threat for the local poor children. That is the hypocrisy of the health policy for the poor world by the International Community especially the WHO in Geneva.

Dr. Beat Richner, PC 80 60699-1

Note: Edited only for brevity ("..."), emphasis original.

Source: Richner (2007: 15).

Narrative 3: What about Poverty and Livelihoods?

Risks and their social distribution represent a third thematic narrative that merits consideration. Given Cambodia's history and least developed country status with an overwhelming backyard poultry sector, poverty and livelihoods should figure prominently in policy. Oddly, poverty and livelihoods have been subsumed into (and perhaps assumed in) HPAI policy without having been made explicitly part of policy goals. Why this is the case has much to do with who drives policy and their motivations. Box 3.4 details a typology of risks at stake in pro-poor HPAI risk reduction across national and international public goods.

Box 3.4: Risks at stake in 'pro-poor HPAI risk reduction'

This term could indeed refer to various, quite distinct risks: (I) the risk HPAI poses to poor-peoples' poultry; (II) the risk HPAI (in poor people's poultry poses) to the poor themselves; (III) the risk HPAI in poor people's poultry poses to not-so-poor people's poultry and related business interest, and (IV) the risk HPAI-affected poor people represent to humanity as initiators of a global pandemic.

Let's face it – 'Risk IV' is driving the international response while 'Risk III' is driving national responses where they occur to any significant measure. On the other hand we also have to

admit that 'Risk I' is nothing that poor poultry producers would rate very high – the likelihood of their poultry dying from HPAI is much lower than that of dying from a plethora of other causes. Likewise, 'Risk II' is also not something we can expect to be very high on the priority list of poor poultry keepers as they, like their chicken, are much more vulnerable to other disease risks. We thus have the problem of non-aligned interests between important 'parties' in the endeavour to manage 'risks III and IV'. (If the global community really cared about 'Risk I', it would have done much more about Newcastle disease, while if 'Risk II' were our main concern, some simple water sanitation measures would have gone a long long way.)

This non-alignment of interests has important implications for the effectiveness and livelihoods impacts of "First Generation" HPAI risk reduction strategies. In particular, initial efforts implemented by national authorities and facilitated by the international community could be seen as 'overzealous'. The result of this for the poor is that the 'cure becomes worse than the disease' giving rise to a 'Risk V', namely that keeping and marketing poultry is constrained and thereby, at least partially, removed as an activity from the livelihoods and (more ominously) subsistence food portfolios of poor people. This may be the most serious risk poor poultry keepers face from the current HPAI 'crisis'. On a larger scale, therefore (i.e beyond specific bio-security measures, compensation scales etc), I would say that, first and foremost, 'pro-poor HPAI risk reduction' means preserving poultry keeping as an economic activity that remains within the reach of people with low initial endowments. To be credible in local eyes, a 'Second Generation' of HPAI strategies needs to provide the means and incentives for these people to attain safety standards that are 'acceptable' with explicit reference to comparable food safety risks and livelihood requirements.

Source: Otte and Roland-Holst (2008).

Indeed, Otte's and Roland-Holst's typology of risks at the national and international levels serve to highlight the difficulties found in Cambodia. Risk III, the risk HPAI in poor people's poultry poses to not-so-poor people's poultry and related business interest, is relatively small given the nature of Cambodia's poultry industry (overwhelmingly backyard-based). While a single infectious dose from afar is enough to trigger a small marketplace epidemic with potential infections to market visitors and retailers, this risk does exist. However, watching wet market activities at Psah Orussey, one wonders what wet market bio-security measures exist given that workers wore no gloves, and except for one seller, wore no face masks of any kind. It should be understood that the more precautions taken by market sellers, the more fearful buyers could become. Moreover, since no Cambodian poultry is officially exported, safeguarding domestic production should have been a political economy driver for the Government's response to HPAI. Unfortunately, livelihood protection did not score high for either the Government or Donors as the results of an elite survey in Section 3.4 reveal.³⁷

³⁷ CEDAC (2007: ¶11) makes this clear: 'Actually, it is difficult for those experienced with HPAI and loss of poultry from other factors to escape from raising poultry as part of their rural livelihood. Job opportunity is a main factor to determine their choice of livelihood options. Since experiencing HPAI, only a relatively small proportion of farmers do not want to be involved in poultry raising any more; other community members even reinvest more than before in poultry raising due to market price incentives.' Suon (2007: 5) adds 'During that time [HPAI outbreak], they had to find alternative livelihood strategies, such as selling rice cakes in the village, rather than waiting to sell labor.' McKenney and Prom (2002) and Hun (2003) make clear that livelihoods have been both on donors and government radar screens for several years already.

As the authorities provide neither compensation nor vaccines, risks I and II have been thoroughly ignored at the national level with strenuous objections and pressure from the international community, to no avail. The political economy of Avian Influenza in Cambodia represents the exercise of that doctrine of risk in its purest form. At the international level, the focus has indeed been on risk IV (as affirmed by the BBC Two docu-drama 'Pandemic' described in an extensive footnote in the introduction and the focus on IEC and surveillance) leading to the emergence of a cure that is indeed worse than the disease itself in risk V. This raises the additional element of uncertainty and scientific risk. Quoting Winston Churchill's 'science should be on tap, not on top', Andrew Stirling has written that 'Policy making must obviously be based on the available scientific information, but science on its own is not enough ... scientific risk analysis is unavoidably and inextricably intertwined with subjective framing assumptions, values, trade-offs and expectations of surprise.' (Stirling 1999: 2)

Beyond risks and their social distribution, who is making the case for poor people? In the Cambodian context, this would typically be the donors (when they are not making their own case), but with respect to HPAI, donors had dual motives. Not simply to combat poverty, but to protect their own countries. Moreover, the culling debate is not about industrial production and exports – as in other countries – but about poor people in the villages and towns. What voice do they have? To answer this question requires an understanding of contemporary Cambodian politics, in particular rural politics, which is the preserve of the ruling Cambodian People's Party. Rural votes are needed to return the CPP to power, yet the CPP uses both gifts and intimidation in what can only be described as patron-client relations that mix the CPP's communist roots with Cambodian feudal society. Thus, while poverty is seen as a problem of the individual—perhaps even the individual's merits in the Buddhist sense—it is possible that pre-National Election cullings would have been discouraged by the CPP for the simple reason that being uncompensated, they were costing too much in negative public relations and political capital. At the same time, the donor community's role in Cambodia cannot be overstated, as will be seen in a closer examination of the actors, networks, and interests involved in the Political Economy of AI in Cambodia.

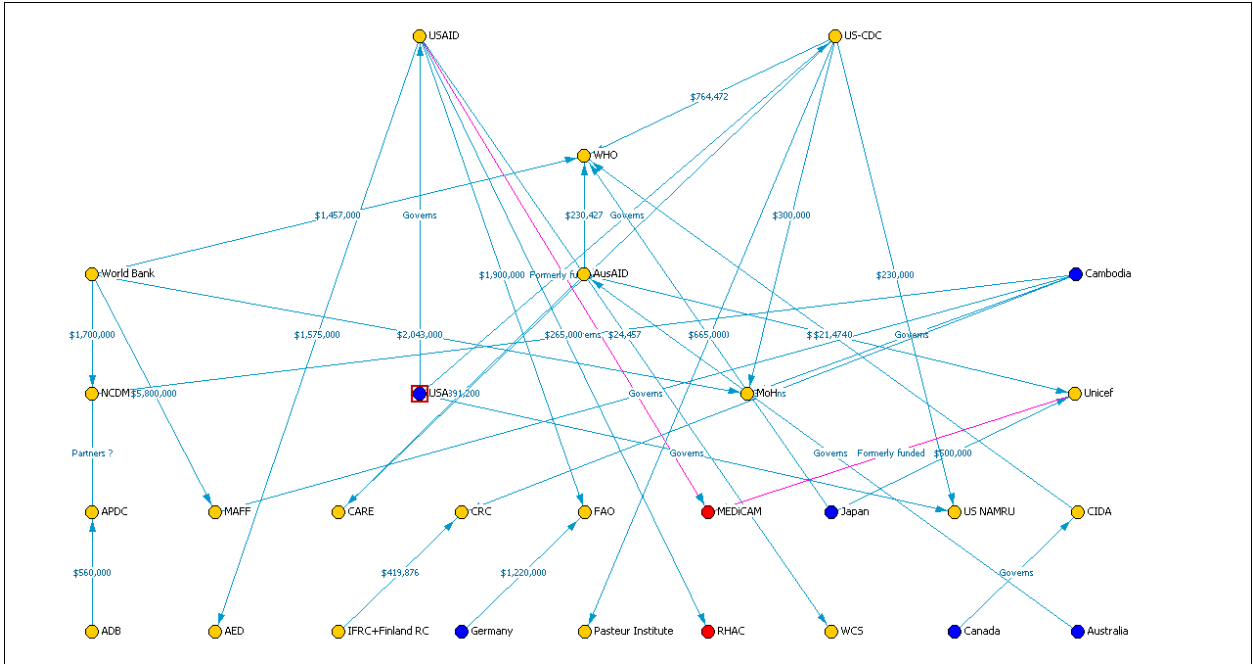
Actors, Networks, and Interests

What is immediately apparent in Cambodia's political economy of Avian Influenza is the numerous external actors involved in a country of only 14 million people. Since the UN-managed elections in 1993 which brought with it a plethora of NGOs, Cambodia's political terrain has been transformed. Most obviously, the international community provided billions in development aid. At least in part, aid was utilized by the governing Cambodian People's Party to consolidate its control over the rural provinces. Equally important, international intervention provided new space in which non-state actors could contest state authority. Invoking democracy and human rights, activists in Cambodia were able to bypass the State and appeal directly to the international community.

Moreover, as detailed in Annex 1, using a Geographic Information Systems database created by MEDiCAM and funded by USAID, more than 160 non-governmental organisations were identified as having AI-related activities in Cambodia. While it is not possible to map the 160+ NGOs, Figure 3.1—shows the Node Degree (defined as the number of physical links per node) ranking of different actors involved in AI interventions. The blue dots (black in grayscale) represent country governments, while the red dots (dark in grayscale) represent local NGOs. Most notably, while dozens of local NGOs were engaged in AI activities at some point, only two remain in this map,

and one, MEDiCAM, actually had received no commitment of funding as of the matrix’s creation and as determined by an interview with a representative of the organisation in early June 2008. It is immediately apparent that the US government has taken a very active role in funding AI activities using USAID and US-CDC. Both organisations enjoy six links or node degrees, more than any other entity mapped.

Figure 3.1: Interest Mapping Ranked by Node Degree 2008-2009

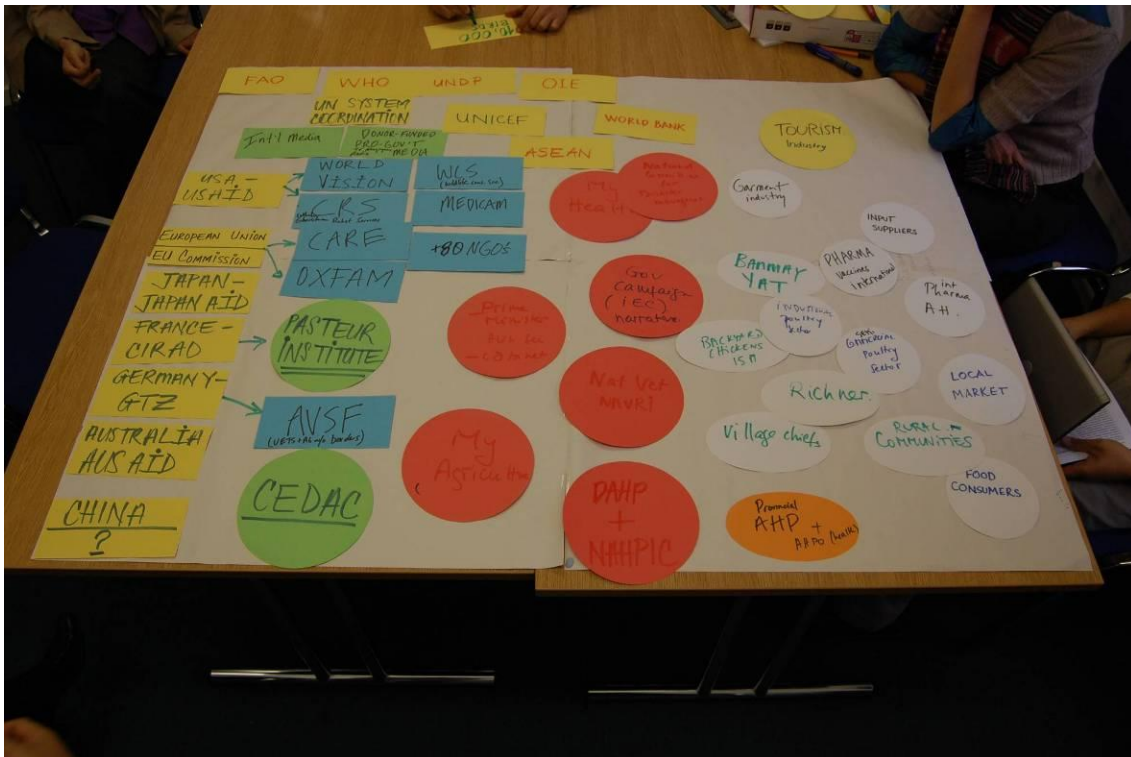


Source: Adapted from data originating from Avian Influenza and Pandemic Preparedness Funding Matrix Cambodia 2008-2009, see Table 1.5 in Annex 1.

As this Interest Map is based on funds and official flows of partners officially recognised by the United Nations Resident Coordinator’s Office, it cannot reveal informal arrangements and interests, an important aspect of the political economy of AI. The private sector, as represented by companies like CP Cambodia, is also not represented because of the opacity of its operations in Cambodia. While such companies were interviewed, the powerpoint the researcher was shown—some 100 slides—was not shared. The primary concern seemed theft of proprietary knowledge/intellectual capital by a competitor.

A network diagram in which a huge barrage of government mediated access to aid, which oiled the wheels, for others involved, had been hypothesised at the Political Economy of HPAI in Southeast Asia workshop at IDS, University of Sussex, Brighton, UK, 23-25 April 2008. Figure 3.2 shows this phenomenon with donors encircling various government entities ranging from MAFF’s DAHP and NaVRI to MoH’s CDC.

Figure 3.2: Network diagram on the relationship between donors and the government



This actor network and its implications for Cambodia’s political economy are revealing. In terms of donor involvement, resources, and who is considered to ‘formally’ have a seat at the table.

Conducting interviews across this vast array of actors was impossible, but to increase the likelihood that a larger number of informants could be reached, a confidential elite survey was launched on 27 May 2008 and sent to 308 e-mail addresses³⁸ of individuals known to be involved in Avian Influenza work in Cambodia.³⁹ The results offer a glimpse of how effective Government and donors were in intervening against AI across animal, human, livelihoods, pandemic preparation, or some other dimension of the respondent’s choosing.⁴⁰

³⁸ The e-mail sent asked recipients to respond, or to refer the author to individuals who worked on Avian Influenza in Cambodia. Responses online were completely anonymous save for an optional question towards the end of the survey requesting an e-mail address if follow-up was desired.

³⁹ The online portion of the survey was open for informants for a period of 10 days. Of these, 44 visited the survey website, and 17 completed responses were received. The survey contained 14 questions, requesting that respondents rate the effectiveness of government and donors, respectively, on a Likert scale, as well as provide written responses where appropriate.

⁴⁰ Of the respondents, 59 per cent (10) had 1-3 years experience, 24 per cent (4) had 4-6 months experience, and 18 per cent (3) had less than three months experience working on AI in Cambodia. The capacity in which these individuals worked on AI ranged widely because cross-listing was permitted: human health (24 per cent); animal health (16 per cent); disaster management (24 per cent); livelihoods (4 per cent); wildlife (8 per cent); and ‘Other’ (24 per cent). This other category included six written responses: (1) Risk reduction and capacity building at the village level (animal and human health); (2) combining animal health and livelihoods impacts; (3) UN agency; (4) Communication for transmission risk reduction; (5) Communication; and (6) AHI Coordination incorporating all of the above. Respondents worked in a wide variety of areas related to AI control activities, including wildlife. Overwhelmingly, respondents were ‘Donor Agency or Foreign Government (Bilat/Multi/UN, etc.)’ (65 per cent), to a much lesser extent the

Respondents were then asked to rate a series of statements and to add written comments to their ratings.

Table 3.1: “With respect to Avian Influenza, the Royal Government of Cambodia has intervened effectively and appropriately, given resource allocations.”

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	N/A
(a) Among humans:	6%	50%	25%	6%	0%	13%
	1	8	4	1	0	2
(b) Among animals:	7%	47%	40%	0%	0%	7%
	1	7	6	0	0	1
(c) Protecting livelihoods:	8%	25%	25%	17%	0%	25%
	1	3	3	2	0	3
(d) Pandemic preparation:	13%	47%	13%	13%	0%	13%
	2	7	2	2	0	2
(e) Other (please name) and rate	17%	0%	0%	0%	0%	83%
	1	0	0	0	0	5

Note: The top percentage indicates total informant ratio; the bottom number represents actual number of informants selecting the rating.

Source: Results of author’s survey launched on 27 May 2008 and sent to 308 e-mail addresses

A majority of respondents agreed or strongly agreed that the RGC intervened effectively and appropriately, given resource allocations, in humans, animals, and pandemic preparedness (56 per cent, 54 per cent, and 60 per cent, respectively). Protecting livelihoods, in contrast, only saw 33 per cent of respondents agreeing or mostly agreeing. Clearly, protecting livelihoods was rated by those deeply involved in Avian Influenza interventions to have been shaky at best. While one respondent (1) felt the damage to livelihoods was limited because of the short duration of outbreaks, others were left totally unimpressed: ‘Nothing is done to take of the livelihoods of the smallholders’ (6) and ‘No specific livelihoods intervention that I am aware of. In fact, there is no record of any discussions on compensation for loss of poultry in the event of outbreak.’ This was not the only criticism. Among humans, one informant claimed that ‘Instances of suspected [cases were] not being investigated’ (17). Indeed, some of the written comments (see Table 3.2) in the area of protecting livelihoods were among the harshest.⁴¹

international NGO community (24 per cent), For-Profit Private Corporation (6 per cent), and ‘Other, Please specify’ (12 per cent). The survey focused on perceptions of effectiveness of the AI response.

⁴¹ ‘Nothing is done to take [care] of the livelihoods of the smallholders’ (6); ‘I am one of the population in Cambodia and I do not hear about the Govt. strategy for responding to AI’ (10); and ‘No specific livelihoods intervention that I am aware of. In fact, there is no record of any discussions on compensation for loss of poultry in the event of outbreak.’ (17)

Table 3.2: Written Comments Associated with AI Government Effectiveness

Dimension	Selected Written Comments Quoted Verbatim
<i>Among humans</i>	<p>Royal government has appropriately resource allocation (only donor resources). The gogermnt has less national budget with respect to Avian Influenza (2) Instances of suspected not being investigated (3) The human resource are very low in Cambodia (4) Have strong surveillence team at national and provincial levels. Currently this team very active. Cambodia right now is implementing ILI survey under management of CDC of MoH (5) Government has worked with UN agencies to prepare to response to Pandamic Avian Influenza. (7) While there is response by ministries such as MoH and MoEYS, the quality of the response is highly variable. Capacity of the government in the key ministries is typically weak. (8) With the support from the Government,AI working groups, Technical working groups have been established, and response on time. (11) The RGC doesn't put all efforts to prevent, control and eradication of Avian Influenza, such as doesn't want to compensate to Poultry Raisers in AI outbreak areas, does not want to share the information, does not want to conduct a trial on the use of AI vaccines... etc. (13)</p>
<i>Among animals</i>	<p>Regarding the disease control the interventions seems appropriate (no outbreaks reported since April 2007). (1) The law for animal movement (local and/or international) not realy existing (4) Virtually no resources allocations have been available for wildlife surveillance. The Royal government has worked with the US Government to allow us to train their forestry and agricultural personnel on wildlife surveillance. However, the Royal government has not allocated any funds for this effort. (9) The Department of Animal Health and Production partners with FAO for training of staff. (17)</p>
<i>Protecting livelihoods</i>	<p>Not being very agresiv in controlling the disease, livelihoods of most people in the country were only little affected for a short period of time. (1) Nothing is done to take of the livelihoods of the smallholders (6) I am one of the population in Cambodia and I do not hear about the Govt. strategy for responding to AI. (10) The IEC work on behaviour change is well recognised for its quality and application. Other countries in teh region and further afield have used this material and process. Good strong coordination between Govt, NGOs and UN agencies have ensured consistency in messages to the local level. (12) No specific livelihoods intervention that I am aware of. In fact, there is no record of any discussions on compensation for loss of poultry in the event of outbreak. (17)</p>
<i>Pandemic preparation</i>	<p>In-principal support is strong, but operational support a bit weak (3) In my point of view is link with the lower and power human resource (4) With the technical support from WHO National Committee for Disaster Management has now untaken the organization a pilot of provincial pandemic planning in Siem Reap. This provincial pandemic planning is participated from diverse departments: public and private sectors. This plan will be decentralized to the district level and will be a model to other provinces-then consolidate as a</p>

	national pandemic plans (5) Spot on TV how to prevent in case where it happen. (7) The provincial lead process is unconventional and globally a first. An excellent model that will support very strongly central pandemic planning that will start soon. (12) THE NCDM partners with WHO on pandemic planning, and an increase in activity within the last year. (17)
<i>Other</i>	Cambodia has good model of partnership among stakeholders in Avian Influenza response. (2)

Note: To preserve the integrity and authenticity of respondent answers, no copy-editing (spelling/grammar correction) was performed on the above quotations. Number in parenthesis represents informant’s unique ID.

Source: Results of author’s survey.

In contrast, donors were somewhat more positively viewed in terms of effectiveness in AI interventions than the Royal Government of Cambodia among humans and animals (77 per cent and 67 per cent, respectively rated as agree or strongly agree). Not surprisingly, donors were also dismally rated on protecting livelihoods, with only 38 per cent of respondents agreeing, and none strongly agreeing that donors had effectively and appropriately intervened, given resource allocations. More surprisingly, only 43 per cent of respondents agreed or strongly agreed that donors were effective in pandemic preparedness interventions.

Table 3.3: “With respect to Avian Influenza, Donors (including all non-Royal Government of Cambodia entities whether local or international) have intervened effectively and appropriately, given resource allocations.”

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	N/A
(a) Among humans:	18%	59%	12%	0%	0%	12%
	3	10	2	0	0	2
(b) Among animals:	7%	60%	33%	0%	0%	0%
	1	9	5	0	0	0
(c) Protecting livelihoods:	0%	38%	31%	15%	0%	15%
	0	5	4	2	0	2
(d) Pandemic preparation:	7%	36%	29%	7%	0%	21%
	1	5	4	1	0	3
(e) Other (please name) and rate	0%	0%	0%	0%	0%	0%
	0	0	0	0	0	0

Note: The top percentage indicates total informant ratio; the bottom number represents actual number of informants selecting the rating.

Source: Results of author’s survey.

The written comments in Table 3.4 reveal differing viewpoints. The primary take-away message seems to have been positive. Donors were praised for paying ‘attention to allocate budget for Avian Influenza’ among humans (2), for their ‘good funding support’ among animals and

pandemic preparation, and across the various dimensions. Highlighting donor constraints, another respondent wrote that 'Donors wish to help the RGC to control AI, but can't put any pressure on the RGC' (10).

Table 3.4: Written Comments Associated with AI Donor Effectiveness

Dimension	Selected Unedited Written Comments Quoted Verbatim
<i>Among humans</i>	All donors paid attention to allocate budget for Avian Influenza (2) Very good funding support (3) I want to say yes and no. YES because the organizations are working in IA are doing their best; and NO because I'm afraid the donors start to forget the problem and I think we still have to work on it and to be careful (4) fairly good collaboration at implementation level. (6) I see many Int'l NGOs have set up the AI projects or activities and spent a lot of money on advocacy and mobilization. (7) Donors strongly support and respond quickly to any human outbreak and all kinds of communication. (8) Donor support to human health is noted. Consistency beyond the perceived emergency period will be more of a challenge but is necessary particularly with regard to pandemic planning. (9)
<i>Among animals</i>	As long as my Organisation is concerned, the Donor intervention is ok. I have no overview of other agencies. (1) Good funding support (3) When we have not enough resources (financial and human) it's difficult (4) Donors wish to help the RGC to control AI, but can't put any pressure on the RGC (10)
<i>Protecting livelihoods</i>	donor support has been strong but is now coming to a close in IEC work. (9)
<i>Pandemic preparation</i>	Cambodia has multisectoral response/stakeholders. (2) Good funding support (3) The process of funding is a bit late. (8) I haven't seen any Int'l NGO has activities on the Pandemic preparation. (7) donor support has been good however very strong and longer term support is needed for multi sectoral planning. Particular attention is needed to understand the parallel process of both central level pandemic planning and provincial level. The central level work will soon receive support but will need capacity development support, and the provincial process will soon run out of financial support. The pilot will be complete but the roll out needs support to truly inform central level planning. and increase resilience to shocks at the local level. (9)
<i>Other</i>	N/A

Note: To preserve the integrity and authenticity of respondent answers, no copy-editing (spelling/grammar correction) was performed on the above quotations.

Source: Results of author's survey.

Ownership is a serious problem not just in Cambodia but in the developing world, and a donor-driven agenda can sometimes result in wag the dog effects where the government nominally

leads by nominally 'chairing' a committee or thematic working group, but donors are in fact calling the shots.

It is also notable that protecting livelihoods had almost no feedback on donor effectiveness, except for one respondent's view that 'donor support has been strong but is now coming to a close in IEC work' (9), a response given to all other areas (human, animal, etc.) and not worth repeating verbatim for all other areas. It seems apparent that if donor interventions reflect government performance, the absence of a compensation policy is not seen as a failing of the donor community's response in protecting livelihoods. This may represent a silenced narrative for the lack of willingness by respondents (again, mostly self-selected from the donor community) to take a hard look at themselves in the mirror.

Drilling further down into naming actors, respondents were asked about which organisations, both in government and among donors were 'successful' and which were 'unsuccessful'.⁴² For successful entities, the Ministry of Health and its Communicable Disease Control (CDC) Department of the MoH received two mentions each for a total of four mentions out of 16 successful entities named, twice as many as the next highest (USAID and MAFF). This certainly suggests that among actors, both the Ministry of Health and its CDC Department stood out as 'successful' in the eyes of respondent. What, precisely, this success means included for example: 'Very strong commitment [*sic*] from leaders of CDC of MoH- with support from WHO, USAID and others' (4) and 'MoH and their partners successful in AI intervention. AI intervention went to all areas in Cambodia. As evident [*sic*] Cambodia has no new confirmed case since April 2007.' (1) Another written entry named the head of the MoH's CDC specifically (17). This highlights the second key theme explored in Section 3.2 that suggests how different ministries delegated in the wake of AI, specifically MAFF versus MoH.

For unsuccessful entities, respondents were much more reticent to name organisations. Indeed, only four organisations were named (see Table 3.5), each receiving one mention. Again, while not representative and vulnerable to settling scores, the exercise is not intended to be representative, merely indicative.

Table 3.5: Comments of all 'Unsuccessful' Entities Quoted Verbatim

<p>MoH has question of sustainability. Because of now depending on donor funds. In addition AI message at community level are limited. (1)</p>	<p>FAO Can not work closely with the NaVRI Can not get the real results - Does not want to cooperate and collaborate with other International Agencies ...etc. Does not want to involve other International Agencies in AI activities. (8)</p>
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⁴² One respondent pointed to the 'current AHI funding matrix for detailed overview of funding across national priorities' which lists the 15 implementing partners (both government and donors) for the \$22 million in 2008-09 allocated to AI and Pandemic Preparedness, to name names, but added that 'Questions using language such as 'unsuccessful' and 'successful' can lead to misunderstanding and inaccurate [*sic*] reporting of the issues as everyone comes with their bias and different levels of knowledge. such [*sic*] findings can inaccurately represent the real issues if you are not careful.' Certainly there is a risk in misunderstanding and misinterpreting words such as unsuccessful and successful, but the exercise was useful in revealing patterns through the use of content analysis. Namely, the number of times an organisation was named counted as an instance, permitting frequency analysis to be used.

USAID: Good big funding giving to many NGOs, but some activities seem not clear, some are overlapping. (7)	Wildlife Conservation Society - This organization does not work with the government veterinary and wildlife professionals. Instead, they conduct surveillance on their own, often providing little information to the veterinary and wildlife officials. The organization should focus on training and empowering Royal Government wildlife and veterinary professionals to establish a wildlife surveillance system within Cambodia. Through well designed and coordinated training efforts, the government will develop the capacity to continue surveillance after NGO expertise leaves Cambodia. (4)
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Note: To preserve the integrity and authenticity of respondent answers, no copy-editing (spelling/grammar correction) was performed on the above quotations.

Source: Results of author’s survey.

Returning to the results of the elite survey, the final question that allowed respondents to maintain anonymity (following which respondents who chose to reveal identifying information could do so in questions 9-14), asked about Cambodia’s preparedness and surveillance (both active and passive) for an Avian Influenza-like disease today. Respondents were in agreement that Cambodia’s preparedness and surveillance (both active and passive) was better today than when they had started to work on Cambodia. Indeed, the difference between the two is only one person’s selection of ‘neutral’ in the surveillance portion of the question over ‘Strongly Agree’ in the preparedness portion.

Table 3.6: “Cambodia’s preparedness and surveillance (both active and passive) for an Avian Influenza-like disease today has improved significantly since I started working on Cambodia.”

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	N/A
Cambodia's preparedness for an Avian Influenza-like disease:	25%	31%	25%	6%	0%	13%
	4	5	4	1	0	2
Cambodia's surveillance (both active and passive) for an Avian Influenza-like disease:	19%	31%	31%	6%	0%	13%
	3	5	5	1	0	2

Note: The top percentage indicates total informant ratio; the bottom number represents actual number of informants selecting the rating.

Source: Results of author’s survey.

Despite a macro picture in which greater readiness for future AI-like threats appears to have been achieved, and both the government and donors have been rated (broadly) positively (at least by themselves), the road ahead is still fraught with risks and challenges.

A number of lessons emerge from this analysis. First, greater government-donor coordination is needed to align national and international interests. Second, protecting livelihoods cannot be assumed. Responses suggest neither government nor donors were particularly effective in this area. Third, respondents conveyed differences in effectiveness both within government and among donors and NGOs. There was remarkable contrast between MAFF and MoH. Finally, the progress made to date by Cambodia is precarious. While it is generally positive, it is only marginally so. Clearly, more work needs to be done. In the next section, the stylized outline of a political economy of the policy process is drawn, beginning the role of Aid and NGOs.

4. UNDERSTANDING THE POLITICAL ECONOMY OF THE POLICY PROCESS

As was detailed in the first three parts of Section II, on Cambodia's political structure and modern history, the role of aid dependence and tourism, and the livestock sector and poultry in particular, Cambodia's political economy context is predicated on power and money in what can only be described as a vast patron-client network of relationships. As a result, the policy process itself is opaque, as elsewhere, and one may even wonder what policy means in Cambodia. As explored in Ear (2005), that process has changed very little and can be summarised as follows:

There are at least three types of policy pronouncements in Cambodia. (1) The 'policy' speech; (2) The Strategy and/or Plan (of which technically there are two sub-types, funded or unfunded), and (3) an actual Prakas (ministerial declaration), Sarachor (circular), Anukret (sub-decree) issued by the Council of Minister, or Chhbab (law) passed by the National Assembly. One would think that the order of importance might be (3), (2), and (1), but this is not entirely clear. The policy speech has the least significance in terms of the long run. It can stop Karaoke bars for a few weeks or months or even make illegal checkpoints disappear temporarily, but they invariably come back. The Strategy/Plan is more significant admittedly, but it is often times more like a wish list, and certainly the unfunded wish list has much less influence than the funded one.⁴³ Finally, while actual legislation should mean something, it is not necessarily the case. These are regularly violated or ignored the further one moves from Phnom Penh, as earlier explained. If and when these policies become law, their enforcement is an entirely different matter.

⁴³ The 2004 CG produced the following Pipeline-High Priority Projects on Agricultural Productivity: (1) Artificial insemination cattle breeding station (MAFF) Donors Sought; Feasibility Study Required 2005-2006 \$91,000 requested; (2) Hemorrhagic septicaemia vaccine production (MAFF) Donors Sought; Feasibility Study Required 2005-2007 \$400, 000 requested; (3) Reduce Mortality and Morbidity of Livestock through strengthening veterinary services and disease prevention programs (MAFF) Donors Sought; Feasibility Study Required 2005-2007 \$480,000 requested. Only (3) is new, while (1) and (2) appeared in the 2002 CG and were left unfunded. The 2002 CG also included a Vaccines, Medicines & Equipment Donors Sought; Feasibility Study Required 2002-2003 \$221,000 requested.

In theory, the general policy process originates in the department of a concerned ministry and moves-up via the Under-Secretary of State in charge (policy maker), then the Secretary of State (policy maker), then the Minister (decision maker), whereupon it can become a Prakas (regulation). If the policy is nationwide and/or impacts policies beyond the Ministry's control, then it must go to the Council of Ministers where it is reviewed and signed by the Prime Minister and countersigned by the relevant line Minister (Oberndorf 2004: 9).

How livestock policies come about in Cambodia has already been the subject of considerable scrutiny by Sen (2003). Based on his workflow diagrams, pro-poor livestock policy is highly centralized and top-down. While the conclusion by Sen, who was at the time a Deputy Director in the Department of Animal Health and Production in the Ministry of Agriculture, Fisheries, and Forestry, is that pro-poor stakeholders need to interact at a level beyond the DAHP, say at the policymaker level which would start with an Undersecretary of State, this is an indication of the political reality of his own department and the lack of power he exerts beyond it—meaning while he no doubt supports the policies, he cannot make the necessary changes as a technocrat.⁴⁴ As such, it speaks to the impotence of the current policy process and, to some extent, of policies themselves.⁴⁵

Given this reality, three themes are apparent. First, donors and NGOs — who number at least in the hundreds — play an important role in influencing policy by pressuring the authorities into making certain policy pronouncements even if these are not, ultimately, respected. HPAI-related aid has emerged as yet another line-item in the revenue stream for the authorities. Beyond aid, the importance of tourism is apparent, as is the role of bureaucratic politics in divvying-up — through patronage — the aid deluge described in the previous section. Without official revenues, the state and its functionaries rely on aid. This then reflects particular interests in and outside the state, forming alliances (of ideas, practices, bound by funds) formed by those in the state and the aid community, with benefits accruing to both sides. The CPP's control of rural areas ensures its electoral survival for the foreseeable future; the bankrolling of its activities requires agile footwork with patronage and corruption. Thirdly, the role of the media's interactions with the state and the limitations placed on the media whether covertly or overtly.

All of these themes link to a core storyline of a weak state in an aid-dependent environment, albeit despite rapid double-digit growth.

Donors and NGOs

The role of donors and NGOs in Cambodia cannot be overstated as shown in the case of Super Moan—even if donors are careful to note that it was created in workshop with government officials. While they are a diffuse group with as many interests as organisations, their numbers are simply staggering. As Scoones and Forster (2008: 55) quote of one informant: 'In Cambodia there are 22 donors active in the health sector. There are over 200 NGOs also and 109 projects. You can imagine how useful it would be if everyone could work in a co-ordinated way.'⁴⁶ Indeed,

⁴⁴ And as we have seen already, even if the changes were made, it would not guarantee any outcomes.

⁴⁵ The fact that he has chosen to take an advisor position (one of dozens, perhaps even hundreds) with a particularly powerful Deputy Prime Minister, which will take him outside the department while he concurrently but only nominally holds his job as Deputy Director, shows the constraints (inside) and opportunities (outside) he faces.

⁴⁶ 'Interview, Washington DC, 11 June 2008'.

while AHI funding stands at \$22 million for 2008-2009, one informant mentioned, in passing, a current health project funded by the World Bank and other donors that will total \$100 million. As of the Sixth International Ministerial Conference on Avian and Pandemic Influenza which took place in Sharm El-Sheikh, Egypt, on 24-26 October 2008, Cambodia ranked seventh among the top 10 'main recipients' in terms of country assistance with \$35 million in 'Commitments' as shown in Table 1.3 of Annex 1. In terms of commitments per capita and commitments per outbreaks, Cambodia ranked only second to Lao PDR. In terms of commitments per human cases and commitments per human deaths, it ranked fourth.

Annex 1 shows a partial listing of just the NGOs involved in the control of Avian Influenza, as collected by MEDiCAM, an umbrella organisation of 120 health-related NGOs, for its database showing which organisations in what provinces work on AI. International support, both economic and technical, results from the perceived threat of disease dispersion to the West and its potentially devastating effects. Indeed, the outcome of donor and NGO activities, with their aid resources, is the third narrative explored in Section 4.1 It examines issues of cross-cutting aid effectiveness and donor involvement, and asks, among other questions, what happens to large amounts of uncoordinated donor aid in an emergency mode and how this works when absorptive capacity of the state is low (or high in the wrong ways). With no predicted human pandemic there is concern that 'flu fatigue' may be the 'biggest threat that we have now' according to Dr. Julie Hall, deputy regional adviser on communicable disease surveillance and response with the WHO's Western Pacific region (Bennett and Gale 2008). Indeed, flu fatigue could spell disaster in more ways than one to the constellation of interests built around the \$2.7 billion 'pledged' worldwide AI 'sector' (of which \$2 billion has been 'committed' and \$1.5 billion 'has already been disbursed'⁴⁷).

As the example of the World Bank's AI project—on hold for two years as it swung back and forth between UN and government implementation—shows, the question of what happens to large amounts of uncoordinated donor aid in an emergency mode invariably arises. (1) How does donor intervention work when absorptive capacity of the state is low (or high in the wrong ways)? (2) Where did the initial money for AI come from and where is it now going? The reason for why the initial plans had been for government implementation of the World Bank project was moved to the UN came from concerns, at about the same time, concerning the very absorptive capacity of the state in the wrong ways. The Bank had just declared misprocurement in 2003 on the demobilisation project and by June 2006 more financial malfeasance was uncovered with seven additional World Bank projects.⁴⁸ Indeed, there was even talk from then World Bank President Paul Wolfowitz of cutting-off Cambodia completely because of corruption in Bank projects.

As Cambodia reaches the fifth anniversary of its first confirmed AI outbreak in poultry, the global AI funding picture looks less certain. Dr. Hall of the WHO told reporters in Sydney on 15 September 2008: 'The threat of a pandemic, of a virus jumping from animals into humans, is still there, but the biggest threat that we have now is "flu fatigue".' (Bennett and Gale 2008) Indeed, as the Bloomberg story that reported her statement notes: 'Misconceptions that the pandemic

⁴⁷ As quoted in Jonas (2008: 6) which characterised the figures as 'Impressive performance in first 3 years of operation of the flexible financing framework'.

⁴⁸ The projects were Biodiversity and Protected Areas Management Project; Flood Emergency and Rehabilitation; Agricultural Productivity Improvement Project; Forestry Concession Management and Control Pilot Project; Land Management and Administration Project; Provincial and Rural Infrastructure Project; and Provincial and Peri-Urban Water Supply and Sanitation Project.

threat is “a storm in a teacup” may sap investment in surveillance for bird flu as well as other infectious diseases, particularly in parts of Asia, where systems are “very weak” Hall said.’

More than \$2 billion has been pledged over the past three years to help poorer nations stem AI’s spread and for pandemic preparedness, and for most donor governments, three years can seem an eternity. As Hall notes, ‘These systems are useful for many different things—from naturally occurring diseases through to manmade and bioterrorism threats ... It should be seen as a long-term investment for multiple purposes that one day will most definitely be needed.’ (ibid) The ‘flu fatigue’ observation is already apparent in Cambodia. As an AI Expert (14), noted ‘Some of the donor concerns is donor fatigue, to maintaining, planning, monitor, etc. Immediate emergency is gone so it’s now more difficult to get the funding line.’

Moreover, the role of the media, both nationally and internationally, has served to amplify or silence messages. According to Donor Staff (16), ‘During the first AI outbreak, the Prime minister obligated all TV channels to broadcast it for free. It goes without saying that all Cambodian TV channels, while not all owned by the government, know better than to defy government orders. As the saying goes in the press, ‘If it bleeds, it leads’, Cambodia is no exception. This is what sells airtime and newspapers and the media are far too negative and need to be in order to remain profitable.⁴⁹ In contrast, a Veterinarian and Consultant (1) reported watching a January 2008 satellite broadcast in Cambodia and saw an exchange Bernard Vallat, head of the World Organization for Animal Health (OIE), had with reporters in which he noted that ‘The risk was overestimated ... We have never seen such a stable strain ... It was just nonscientific supposition.’ (MSNBC 2008)

Just as quickly, an OIE press release dated 16 January 2008 following Vallat’s exchange attempted to do damage control:

In line with the organisation’s position and that of its international partners, Dr Vallat reinforced the need to strengthen the infrastructure capable of early detection and rapid response for any emerging disease at animal level, especially those with a zoonotic potential. He regretted that such capacities were not in place at the very beginning of the H5N1 avian influenza crisis, which delayed the reaction of countries, especially the poorest ones, first hit in South East Asia. He welcomed today’s much better preparedness of countries to detect and control the disease. Dr Vallat repeated the need to strengthen the governance of veterinary services and to improve the collaboration between disciplines, as well as between private and public sectors.

Ultimately what better preparedness has been achieved for Cambodia to detect and control AI? From one AI Expert’s (14) perspective ‘What we have ... in Cambodia is not only commitment in

⁴⁹ As Burgos (2008) notes: ‘In recent years there have been ongoing commentaries, narratives and debates about the origins of emerging zoonotic diseases, and these were more pronounced after the advent of SARS and HPAI in Asia, whose worldwide notoriety swelled due to intense media coverage. Mounting public concern coupled with ignorance-fuelled anxiety, prompted many journalists and so-called pundits to find someone to blame. They glibly ascertained that these diseases come as a result of close interactions between humans and animals in conditions with minimal sanitary regulations in overcrowded marketplaces in Asia. As a consequence, international audiences started to label these nations as dangerous and unsafe, which resulted in negative economic impacts due to reduced tourist influx and diminished trade.’

government but also our commitment that things are aligned to government priorities ... In other countries the plans are written purely by donors.' As can be seen from Box 4.1, a variety of issues illustrate the manner in which donors operated in Cambodia—from the usual three year focus that shifts to the usual lack of coordination that reduces the effectiveness of interventions.

Box 4.1: Aiding What?

They work on people's fears...There will always be a maybe. Anyway, there are all these people coming in with money dripping out of their ears ... We couldn't get anything done.⁵⁰ Everyone wanted to do general health group and then within three years everyone gets stuck in their way. All the money would switch off from one place into another. *Veterinarian and Consultant (1)*

If you are looking to policies to assist poor countries, as opposed to poor people, then one key must be to persuade the developed world to find ways allowing freer trade and movement of livestock and products, and finding other ways of protecting their home producers. If we take F-M-D as an example, this is the most widely used animal health barrier raised against importation of cheaper products from outside. Misguided aid programmes are spending hundreds of millions trying to create systems of control in countries where, to the majority of owners, the disease is of only minor importance but its associated movement controls are a major hindrance to their effective pursuit of their livelihood systems. It might be much more productive if this money was invested in developing cheap effective vaccines with which farmers in the developed economies could dependably protect their stock.⁵¹

Yes it is interesting how donors put an emphasis on things. If you ask farmers which one they prefer to buy, a net for human or build fence for animals? I'm sure they would say net for human. If the awareness of people is not achieved, how can we control the pandemic? But still awareness does not guarantee that people are ready to manage pandemic. For example in Vietnam, we successfully promote awareness to people, everyone can tell about prevention methods. But are they going to do so, no. ...I know I should burn the dead chicken but it is food. *AI expert (7)*

Of course, that's a lot of money, but at the same time they have to be honest, money only is not enough ... We also need to show the world that rural development cannot be done in a few years; to get concrete results we need more time and action ... Some partners don't want to admit this aspect, because they have limited funds and time. For example, the AI project has been implemented since ... about 2005, so it is not yet three years, and ... any rural development activity can have tangible result only after three years. It is the reality.⁵² *AI Expert (24)*

⁵⁰ According to Veterinarian and Consultant (1): 'What you should do is take the money and create a process site and not bring in live birds. About a million live birds coming in from the wild flock. And about the same number coming from the industrial flock. Everything is being done on a least-cost basis. There's no control. There is no management. No one knows what a sick bird is and what isn't a sick bird. And I said while everybody is frightened of this you should start banning birds and kill them outside then bring them inside dead. I haven't done a survey that would allow people to buy dead birds or dead meat in packaged form. If the price is right people will do anything, but can you still get passed this religious thing? To the ancestors you had to have a live bird.'

⁵¹ As relayed via e-mail by AI Expert (5).

⁵² AI Expert (24) added: 'However, it is usual that the donors worry about where the moneys go and how they are used, but development issue cannot be as obvious as constructing a building.... For example, in

One thing you should ask is that they contracted so much money with NGOs, some NGOs got so much money, more than the money I have for the whole country project ... Now, they have donor coordination meeting, but that was only donors' agenda, it was not so much about the country. ..We need more transparency from donors as well. One of the things we should do is to coordinate among donors, make sure our supports are not duplicated. So far, they had never contacted me. As a result, most of the time we saw the government staff went busy with trainings supported by donors and didn't have time to implement their actual work. Donor Management (26a)

Source: Author's interviews except where noted.

Ultimately, AI interventions are only a small part of a much bigger aid system that has not served Cambodia particularly well in terms of building local capacity for ownership and fiscal independence. Have AI interventions been more or less successful than other activities in Cambodia? In some ways, functioning in emergency mode, expectations will be lower than those of longer-term development activities, not unlike what Cambodia saw in the early period of post-conflict when reconstruction and rehabilitation were job one. In other ways, an entire aid system has been built in Cambodia and local capacity has improved considerably since 1993. It is unlikely, however, that the performance of emergency aid to control AI would be superior to normal development aid.

Beyond Aid: Other Sources of Revenue and the Importance of Tourism

As examined earlier, tourism accounts for around 14 per cent of Cambodia's GDP and has clearly stood out in the past decade for its tremendous contribution to growth. Tourism has been the main contributor to growth in the services sector which held the largest sectoral (41 per cent) share of GDP in 2007 and is increasingly important given concerns that garments (which is of equal share) will be on the decline due to the coming global recession. Cambodia's Angkor Wat, located in the tourist Mecca town of Siem Reap, was one of 13 finalists for the New Seven Wonders of the World list which took in more than 100 million votes. The fear of tourists being scared affected the political economy of the policy process for HPAI by disincentivising the need for active surveillance. Many of Cambodia's senior leadership have huge financial stakes in luxury hotels and the tourism industry through joint ventures in which they invested little or nothing but brought political connections (*kse*) or backing (*knornng*). Lower revenues would hit their pocketbooks directly. Given that concerns over HPAI and possible pandemic would scare tourists away given Cambodia's strictly limited medical facilities (aside from SOS International, which specialises in medical evacuations, there are no hospitals of true international standard), this made the country particularly vulnerable.

term of AI project, the result can be revealed by increasing numbers of survivors, supervisors... Well, they are donors, it is their role to think so ... It is completely understandable that when they give money, they need to know exactly how many people have been trained. Training someone does not mean providing the course, but to see what they will be able to do later. I think that most training providers, including us, always neglect this aspect due to the lack of time and funds. They think that the practice and follow up must be core value of any training: we cannot exclusively focus on the theory.'

While it is not clear who specifically got involved in the process, it is known that one of Cambodia's most powerful politicians (who dabbles in cockfighting and agribusiness on the side and has interests in numerous highly profitable enterprises, including hotels) did not believe that the threat of HPAI was severe. Far from it, he realised early on that it was a donor-driven concern (Veterinarian X). This official would have been deeply engaged in any decision concerning compensation, surveillance, and funding of any sort towards HPAI control and intervention. Luckily for Cambodia HPAI did not jump from animals to humans en masse with only eight victims detected, and there was no discernable drop in visitor arrivals.

Thus, news of HPAI alone could scare away valuable tourist dollars. The culling would satisfy international standards of bio-security

Bureaucratic Politics and Patronage

Bureaucratic politics of Cambodia belies underlying patronage struggles in the face of an increasing number of cabinet appointees (the most anywhere in the world) and how donor resources in the form of aid can be divvied-up. The turf wars between ministries are as much about the ability to extract from discretionary power (taxation, licensing fees, etc.) as they are about obtaining vehicles and salary supplements.

A project director—in government—bemoaned having to leave one donor for another because he would not be permitted to receive pay from both. He weighed the pros and cons of each carefully. Of course, at the end of the day, this would not be his only revenue stream. Staff in the ministry must pay up the pyramid, a normal feature of working the 'system'. Trips within country or abroad are 'taxed'. Decisions to extend contracts are 'taxed'. But the story is all too common in aid dependent countries: without its own resources (because of an unwillingness to raise official revenues) the state and its functionaries rely on aid. In turn, the functionaries then reflect the particular interests inside and outside the state, thus alliances of ideas and practices are bound by funds and are formed by those in the state and the aid community, with benefits accruing to both sides.

Quarrels, rivalries and competition between political parties, ministries and departments are commonplace in any country — and Cambodia is no exception. When the issue arose with one informant, he pointed to France's legendary quarrelling bureaucracy. This constitutes one of the major components of institutional failures coupled with the lack of in-country qualified human resources in the particular case of Cambodia that can help explain some of the challenges faced by Cambodia. As the fight against AI began with animal health, the MAFF was the key Ministry involved and the Department of Animal Health and Production (DAHP) its focal point.

Because the MAFF oversees forestry and good governance of the forests (among other natural resources) has long been a contested area for donors and the RGC, the MAFF has not had a particularly good image in the eyes of donors to begin with (Post-Conflict Reconstruction Expert: 56). Exploitation of the forestry sector began early and happened often.⁵³ The Khmer Rouge and Royal Cambodian Armed Forces fought by day and worked with the Thai military to trade timber and gemstones by night (Post-Conflict Reconstruction Expert: 56). The segment of the Khmer Rouge (Y Chhean) in Pailin area financed their efforts at self-demobilisation and reintegration

⁵³ 'When Hun Sen started with his first mandate, he had one rein with Forestry, so he maintained two hands, and in the second mandate, he maintained only one hand...so [now] these people just go around [doing anything] and that he is not controlling them anymore.' (Donor representative 16)

mainly through gemstones and timber, while the Anlong Veng group (Pol Pot, Ta Mok et al.) were mainly in the timber trade (Post-Conflict Reconstruction Expert: 56). Thus, it is with the legacy of forestry exploitation that donors often regard the MAFF, and the record at DAHP, while not nearly as exploitative, has its own legacy of trade impediments (Ear, 2005).

The competition for resources first between the MAFF and the MoH, and then among the MAFF, MoH, and NCDM could be apparent if only one examined how money had, prior to AI, flowed. As animal health had not been a high priority for donors given that human health was already so weak, the MoH had a long established record of receiving and processing significant donor resources. As can be seen in Figure 4.1, the health sector, including funding for population projects, received almost 10 per cent of bilateral resources in 2005-2006.

Figure 4.1: Official Development Assistance to Cambodia 2004-2006

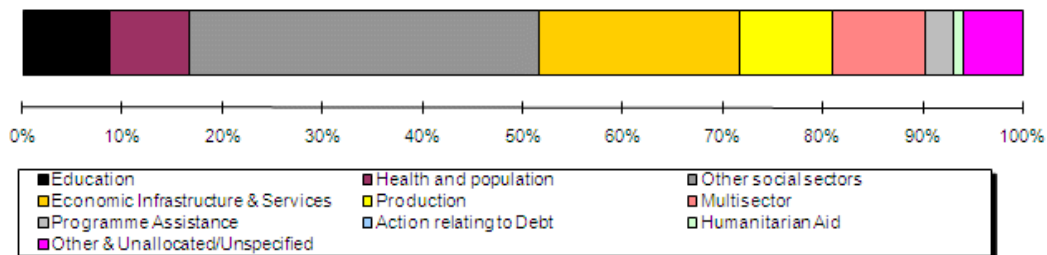
Cambodia

Receipts	2004	2005	2006
Net ODA (USD million)	483	541	529
Bilateral share (gross ODA)	65%	66%	71%
Net ODA / GNI	9.6%	9.1%	7.7%
Net Private flows (USD million)	- 167	2	190

For reference	2004	2005	2006
Population (million)	13.8	14.1	14.4
GNI per capita (Atlas USD)	380	430	480

Top Ten Donors of gross ODA (2005-06 average)	(USD m)
1 Japan	104
2 AsDF	73
3 United States	66
4 IDA	31
5 Australia	31
6 France	30
7 Germany	26
8 EC	25
9 United Kingdom	22
10 Global Fund (GFATM)	21

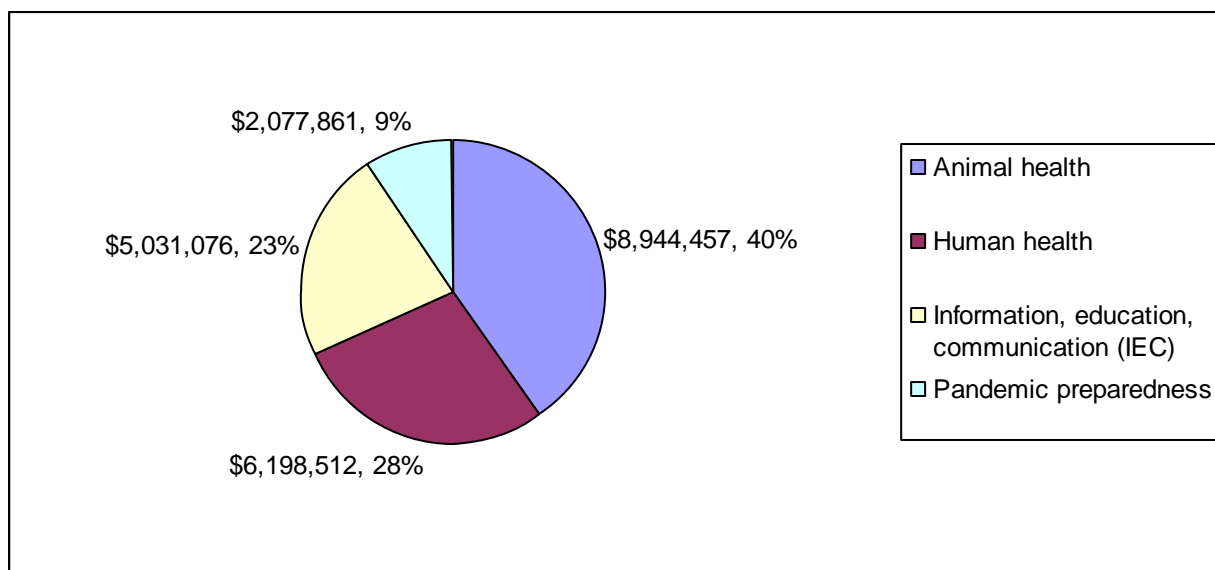
Bilateral ODA by Sector (2005-06)



Sources: OECD, World Bank.

While the situation had been quite skewed towards human health, the World Bank's recent AI project notably allocated \$5.8 million to animal health, \$3.5 million to human health, and \$1.7 million to pandemic preparedness. (AI Expert: 6). As with any pendulum, there will be swings back and forth as different interests coalesce and divide the funding pie. Figure 4.2 shows the current breakdown of committed funds for Animal Health, Human Health, IEC, and Pandemic Preparedness.

Figure 4.2: Cambodia's Avian Influenza and Pandemic Preparedness Pie in 2008-2009



Source: Adapted from data originating from Avian Influenza and Pandemic Preparedness Funding Matrix Cambodia 2008-2009, see Table 1.5 in Annex 1.

The themes that emerge from Box 4.2 suggest that MoH's track record in managing funds gave it an edge over other entities in the initial years (precise data for which is unfortunately not available) and that MAFF's large share thanks to the World Bank project is already seen as a pretext to return to human health once again.

Box 4.2: MAFF, MoH, and NCDM

They thought that we don't have capacity to cope with animal health, and they don't want to invest in capacity building. The thing is the World Bank sees that MoH has the capacity in managing finance, where the MAFF doesn't, so they need more money to actually strengthen that financial system. Also they see that the MoH is way ahead of the MAFF. The MAFF doesn't even have any budget on that. *AI Expert (6)*

It should be noted that health system has been stronger for quite some time already, while the agriculture has not. More attention has been paid to strengthen the health system, which is not the case with agriculture. With the fact that authority over resource been given [to health projects], it is about ownership. Health people think it is their project, while the agriculture does not see it the same way. *NGO and IO doctor (18)*

From my experience in the last year, the MoH has delegated more authority to deputy chief who is committed and effective in responding to problems at provincial level, with helps from NGOs. In agriculture, however, its sub-national level structure is still limited and not smooth, plus, there is no clear delegation on who should do what, and people seem to wait for other to act, making it less responsive to any events reported through the hotline. But with medical doctors, when they

know about people infected with AI, they go down quickly and diagnose. With the animal health workers, the response has been slower when hundred of chicken die. Sometime, animal health workers get the information from human doctors. Actually, the animal people should know first, because the animals die first before the disease gets transmitted to people... So the communication/information sharing of the animal health workers is still problematic... *Health Expert (25)*

I think from the FAO perspective, the guideline should be how much money do they have, how much accountability, and how much benefit to the MoH? Now that the MAFF/DAHP's NaVri got money only from World Bank, some international donors are shifting their funding towards health sector since it has better coordination system. Some donors just wanted to advertise their logo on the IEC materials. *Donor Management (26a)*

In fact, MoH and MAFF can barely collaborate, though with AI issue, they have to work jointly, but tension still occurs. For example, regarding World Bank's funds for AI, MoH seems unsatisfied due to strictness of the Bank funds' administration and procedure, while MAFF welcomes the grant as they have never had such grant. NCDM also strongly satisfied its role of coordinator. I noticed that NCDM does not really play its role well, as it is a huge structure which includes all kind of disasters so that they don't know how to effectively integrate and handle AI within their program. However, some improvements have been done recently with the pilot provincial pandemic plan in Siem Reap province which makes all the ministries involve... *Donor Staff (32)*

When there is an outbreak, there is one man team X is only one in Ministry that's active in AI ... The MoH is better than MAFF because they allow [the deputy director of CDC] to be spokesperson. [The head of NaVri] knows everything about the law. But problem is that he doesn't have power. For example: the higher authority in the MAFF blames them for discovering AI and not keeping it quiet. Authorities do not want to have it publicized because it looks bad. How can you care about animal welfare when they don't even look after people's welfare? *AI Expert (12)*

I observed so too. This is a problem in Cambodia. When the Chief is not at the office, the Vice Chief cannot do anything because the Chief take official stamp with him. They have to wait till the Chief back to office so that they can decide on matters. I think the MoH is better because they have exposed to NGOs work. *NGO and IO doctor (18)*

I think MoH they have all the policies and systems in place, but the challenge is how they coordinate and how they get the systems work. For example, if no donor, they will not do anything. AI in Cambodia we are dealing mainly with two main institutions. One is the Ministry of Health and another one is NCDM. The last institution has multi-sectoral ministries include agriculture, and many other ministries concerning AI. Coordination is still an issue. For funding I think it is balanced. Since it is an issue of disease so, people see this more as health issue. *NGO Doctor (15)*

Source: Author's interviews.

More recently, a 20-21 May 2008 'Step 4 supplementary workshops in Siem Reap Multi-Sectoral Pandemic Planning Process (pilot)' (UN System 2008: 2) is a case-in-point about bureaucratic politics. The organizers did not invite MAFF at the national level, but involved provincial level participation. As one official asked 'I wonder why they developed preparedness plan without

participation from the MAFF? I will call them for a meeting to clarify this.’ One of the organisers reported that ‘They complained that we did not include their ministry’ and the reason was that ‘this is a multi-sectoral response project; so, out of all the 24 sectors, we selected eight ... We will invite MAFF after we draft operational goals and objectives for the project’ adding ‘If we invited the ministry to participate all the times, we will not be able to get information from the field. There are many other ministries that we didn’t invite to the meeting.’⁵⁴ Indeed, the reaction was not merely a complaint but according to Donor Staff (16) ‘MAFF argued that animal health is the most important issue, and MAFF is the only institution which has authority in this sector. MAFF definitely refuses to cooperate with other institutions if the next outbreak cases occur.’ As a Donor Staff and Doctor (32) summed it up, ‘MAFF has to understand too, in the ‘pandemic’ stage, animal health doesn’t matter anymore, but food security, human health, prevention, behaviour modification, etc...’

That recent incident highlights the growing involvement of NCDM in activities that are shifting from an AI-only to a pandemic preparedness emphasis, whatever the origin of the pandemic. As a Health Expert (25) explained:

Although it sounds like we just started with this ‘pandemic’ business, we actually thought about forming the project for three years already. Actually, people talked about it for some time already, but when they talked about AI, they talked about pandemic together... For instance, HE Nhim Vanda, the head of NCDM and the vice-chair of the working group on AI, and I, see that the ministerial level pay attention on this AI issue. At the provincial level, now when we have meetings on AI, key people from the 24 line departments also attend and pay more attention... However, understanding of these people has still been limited. They still think: what is AI? What is pandemic?

The World Bank’s \$11 million (of which the Bank funded \$6 million and other donors funded the remainder) Avian and Human Influenza Control and Preparedness Emergency Project involving MAFF, MoH, and NCDM, formulated in 2006, took two years to eventually be signed. It was envisaged as government-implemented in a June 2006 draft of the project document, then shifted to implementation by FAO, WHO, and UNDP in a 20 April 2007 draft only to grind to a halt because of disagreement between the World Bank and the United Nations (of which, the Bank is a fully independent specialised agency thereof) over who would have the final say over audits. Unable to come to an agreement, a 14 February 2008 version the project reverted to government implementation.⁵⁵ Box 4.3 describes the recent struggles of the project, following passage by the Bank’s Board. These underscore the human resources constraints and bureaucratic politics of project control and implementation.

⁵⁴ Not identified to protect informant.

⁵⁵ Paragraph 10, to be precise, was added to World Bank (2007) from World Bank (2006d) and then deleted in World Bank (2008b): ‘10. The Royal Government of Cambodia (RGC), as Recipient of the grant financing, has decided to delegate the implementation of the project activities to three specialised agencies of the UN System, FAO, UNDP and WHO. [*sic*] which will be acting as Implementing Agencies (IAs) on behalf of the RGC. These institutional implementation arrangements would contribute to fast and cost-effective implementation, providing assurances that the surveillance and response systems are fully operational in a short period, therefore, able to produce an effective response in the event [*sic*] of an outbreak in poultry or a large number of human cases. At the same time, it would help avoid increasing risks derived from the limited financial management capacity of government agencies and the concerns about misuse of funds.’ (World Bank 2007: 10).

Box 4.3: The Curious Case of the World Bank's AI Project: Capacity Development and Bureaucratic Politics

At a technical level, they have no problem. But at political level, I'm not sure. NCDM and HE Nhim Vanda got order from Prime Minister to coordinate between the two ministries. But the condition was that NCDM is there only to coordinate, not to manage. They can call for a meeting because they use the name of the Prime Minister. At that time, NCDM was not yet strong, until person X came in. UNDP would like to support NCDM as well but they are concerned that X will leave soon, so they decided not to. I told them that capacity building should not focus on an individual alone, to which they agreed. But what they told NCDM was that if they were to support the project, they need to spend a lot of money on recruiting new staff, while project activities are very few. Sok An signed agreement between the government and UN system. Nhim Vanda said even though the budget is small, the UN should not drop this project. UNDP told me that they are concerned that X will leave, and if he leaves, NCDM will collapse; they feel more comfortable to collaborate with the two ministries when there is NCDM. I said it is not right to support individuals, because individuals do not stand still, they will move from one place to another. We should better look at system. *Donor Staff (31)*

FAO is difficult, but working with government is even more difficult. Now, it is just beginning of the process and NCDM would like to take control over this project. The other day, I heard they put HE Pov Samy as the head of World Bank's bird flu project. I said no, I never heard about this. Then they responded that they were confused, he is the head of NCDM's portion of the project. But from what I know, they didn't mean to make any mistake, they did so for real and they wish to submit that to the Prime Minister. Now I heard that for those who used to attend meeting like me and person Y, they send our names to Prime Minister. When we had a meeting at World Bank office, when Ministry of Finance and WB visited Ministry of Health, HE Nuth Sokhom (from Funcinpec), he asked person Z to come to the meeting without giving him any information about the meeting. Then person Y was also there, so a dispute occurred with all present ministries there and including World Bank. They are always like this, always asked people who never know about the project to come to meetings, and they could not give any answer. Now Pov Samy said that all those who have attended the meetings, will be part of the project. Until now we have no idea who is responsible for the project. Those who have political positions cannot be part of the project. Person Y is afraid that they ask him to be responsible for that project, and me too. *Government Official (33)*

Source: Author's interviews.

Media Spin

A third and final theme can be considered in the domestic and international interactions of the media. On the one hand, the national press has been increasingly constrained in newspapers and radio, and completely monopolised by authorities in television (Ear and Hall, 2008). Thus, informant X explained that the Prime Minister had ordered all TV and radio stations to broadcast messages about the dangers of HPAI.

Recall that according to Ly et al. (2007), despite media reports in Cambodia about HPAI through radio and television broadcasts, which created high awareness and widespread knowledge about HPAI, rural Cambodians continued to practice risky poultry handling. Building on these findings, Burgos et al. (2008) argue that:

Improvement in risky practices can only be achieved through repetitive behaviour modification messages. Effective intervention programs must include feasible options for resource poor households that have limited materials for personal protection (water, soap, rubber gloves, and masks) and must offer farmers alternative methods to safely work with poultry on a daily basis. (Burgos et al. 2008: 21)

Moreover, the free press self-censors in Cambodia due to fears of recrimination (i.e. journalist murders) and this may slow down the time it takes for issues to rise to the surface and therefore hampers progressive policymaking in the long run.

On the other hand, the international press is remarkably fickle when it comes to reporting progress, but is too often fixated on the negative. It moves from crisis to crisis, and maintains a level of alertness known as the 24 hour news cycle pioneered by CNN. Burgos et al. (2008) sum-up the drawback this way:

Since its re-emergence, HPAI H5N1 has attracted considerable public and media attention because the viruses involved have been shown to be capable of producing fatal disease in humans. While there is fear that the virus may mutate into a strain capable of sustained human-to-human transmission, the greatest impact to date has been on the highly diverse poultry industries in affected countries. In response to this, HPAI control measures have so far focused on implementing prevention and eradication measures in poultry populations, with more than 175 million birds culled in Southeast Asia alone ... Until now, significantly less emphasis has been placed on assessing the efficacy of risk reduction measures, including their effects on the livelihoods of smallholder farmers and their families. (Burgos et al. 2008: iii)

Indeed, there can be no doubt but that the emphasis on HPAI placed by the international media has been on the fatality of the disease and not on the efficacy of risk reduction measures. Ignored has been the allocationaly redistributive nature of these interventions on those who have the least capital—both human and financial. The media shape public perceptions and their collaboration in dealing with future animal health crises is essential. As was alluded to earlier, the BBC's Pandemic⁵⁶ aired a 16 minute scenario (one of three potential scenarios)⁵⁷ on 7 November

⁵⁶ Based on the professional-grade acting and production of the docu-drama, the author believes that a unit established in Cambodia by the BBC World Trust, the BBC's international charity which uses 'media and communications to reduce poverty and promote human rights, thereby enabling people to build better lives' and is 'funded by external grants and voluntary contributions, mainly from the UK's Department for International Development (DFID), the European Union, UN agencies and charitable foundations through DfID' (<http://www.bbc.co.uk/worldservice/trust/aboutus/>) produced the drama. The acting, the lack of dubbing which is still somewhat unusual in Cambodia, and the cinematography are consistent with 'Taste of Life' a BBC WST produced television drama 'set in a Cambodian nursing college and the affiliated hospital ... part of a three-year multi-format media project addressing issues related to HIV/AIDS, sexual and reproductive health, and maternal and child health. The drama, which is fully researched, scripted, acted and produced by a Khmer team, employs a range of dramatic devices to

2006 on BBC Two, and rebroadcast on Australia's Special Broadcasting Service (SBS) Television, watched by more than seven million Australians each week.⁵⁸ It was likely made with the consent or help of the World Health Organization, which plays an important role in the storyline. Over an increasingly rapid piano score, a narrator with a British accent begins: 'Scientists are worried that the H5N1 virus will soon acquire the ability to infect larger groups of people. They're confident that when it does, it will do so somewhere in Southeast Asia.' The camera then pans to Phnom Penh's unmistakable urban landscape and the words 'Phnom Penh, Cambodia' and 'next week' appear on the screen.⁵⁹

The narrator continues: '24-year-old laborer Eav Chhun could be anyone of millions of migrant workers scattered across the region. He is making a long journey home to visit his family in the north of the country. Although he doesn't know it yet, Eav Chhun is about to become a vital part of H5N1's next step on the road to world domination... It will be the last time that Chhun makes the journey north.' It features not just actors, but Dr. Gregory Poland of the Mayo Vaccine Research Group, who explains how 'Right now this H5N1 virus is causing a pandemic in birds but very little disease in humans ... but the reason it hasn't been millions of people is because this H protein right now cannot attach very easily to human cells and cannot spread from one human to another' adding 'the best scientific estimate is that one or two mutations will be enough to allow this virus to attach easily to human cells, and thereby spread from one human to another.'

The drama later shows a Caucasian female doctor, also with a British accent, running a health clinic in the Cambodian countryside,⁶⁰ alarmed when she hears from one of her patients of the spread of influenza-like symptoms in a small village. A concerned bureaucrat at the World Health Organization's office in Phnom Penh jots down notes and prepares to leave for the village in a convoy of shiny Toyota Land Cruisers filled with personal protective equipment.

Meanwhile Eav Chhun, who has already contracted H5N1, literally crosses paths with the convoy at high speed unbeknown to himself or the WHO. Chhun returns to Phnom Penh whereupon he spreads the disease to unknown thousands.⁶¹ A satellite image of Phnom Penh, then Southeast

deliver health information to its audience in Cambodia.' (<http://www.comminit.com/es/node/214600>). According to the show's website: 'In Cambodia we are funded by the UK Government's Department for International Development to run a three year campaign on HIV and Maternal and Child Health ... Taste of Life is a TV drama series of 100 half-hour episodes. We have started shooting from April 2004 and went on air in December 2004.' (<http://www.tasteoflifecambodia.com/abouteng.asp>)

⁵⁷ One is on a young Cambodian man, the second is about a British businessman, and the last scenario is on a young British girl. One reaction to the video from 'jnnycliff' dated 6 months ago: 'What the hell. This is not true at all. They don't even know where the bird flue came from and where it start first. Why have to be in Cambodia? Well, just be sure this is the true story, and I will research about it.' A reply to that comment by '12connor213' (3 months ago): 'The WHO is making an educated guess it will start in SE asia cause thats where the H5N1 virus has been located in birds the most.'

⁵⁸ The video (split into two parts) has also been posted on YouTube and has been watched 2,831 times as of 22 August 2008: <http://www.youtube.com/watch?v=YeL3pM8L8DA>

⁵⁹ It is not known if the RGC cooperated, allowed, or had any idea that the drama would frame Cambodia's image in this manner. The video are uploaded to YouTube stripped it of the credits at the end.

⁶⁰ 'starwriter' (4 months ago) writes: 'notice the "whites" have to figure it out and rescue everyone...hhmmm??'

⁶¹ 'Sulyaman' (1 year ago) comments: 'This is exactly what i mean...That guy should have been shot and sprayed with chemicals, but no, they just let him walk by coughing-this is what i mean by humans can get lazy. He is one of the best examples of what i mean of a bastard who has to spread it and then it spreads on and on, that will kill us. Its people just like him. Shame on the cambodian officials for letting this happen. IF someone coughs and sweats etc. in a country that has the birdflu you'd be a moron to go close to them.'

Asia, and finally the West Coast of the United States fills-up in a cloud of red as the virus spreads. Scenes from fictitious newscasts around the world show the virus' deadly global impact. The narrator warns: 'Within eight weeks of Eav Chhun's fateful journey, pandemic flu has spread from a tiny village in a remote part of Southeast Asia to much of the planet... Every nation is affected.'⁶² He concludes: 'The virus is no respecter of wealth, religion, or location. As the infection relentlessly overcomes any government efforts to keep it out, nations around the world start to mourn their first dead.' The docu-drama closes with a framed portrait of Eav Chhun, now deceased, on a small stand in a darkened room. His mother holds incense in clasped hands, praying for his soul.

While the reach of newspaper-based media is slowly eroding, the power of television-based media has grown. The show *Pandemic* succeeds where news print has failed, but the risks of portraying Cambodia as the originator of victim zero in the next pandemic risks making Cambodians victim zero in the international hunt against HPAI H5N1.

5. CONCLUSION

This study has investigated the politics of policy processes surrounding the response to HPAI in Cambodia, identifying key actors, networks, associated narratives, and practices of policy. It has questioned the assumptions being made and explored different framings in the debate, including those often not heard in mainstream policy circles.

Section 2 provided a background to Cambodian politics and modern history, set the context of aid dependence and tourism, the livestock sector and poultry in particular. It raised the spectre of SARS as a wake-up call for HPAI H5N1 turning into a pandemic, with Cambodia as its most vulnerable target and potential originator of victim zero. Cambodia's HPAI control activities shifted from animal to human health, and finally evolved into innovations such as 'Super Moan', transforming into pandemic preparedness and creative uses of bans on livestock import—under the pretext of boundary disease control—to benefit domestic pig producers. The timeline of key moments from start, middle, to end, was examined further in **Section 3** for three policy narratives: first, culling without compensation, second the shift to health, and third the looming question of what's poverty and livelihoods got to do with it? This is then followed by actors, networks, and interests mapping, offering a glimpse of how effective Government and donors were in intervening against AI across animal, human, livelihoods, pandemic preparation, or some other dimension of the respondent's choosing. It makes use of the results of an elite survey undertaken in May-June 2008 and sent to 300 individuals involved in AI in Cambodia. **Section 4** honed-in on key themes defining policy of particular interest arising from the previous sections. Three narratives—by no means exclusive—were detailed: (a) Donors and NGOs; (b) Beyond Aid: Other Sources of Revenue and the Importance of Tourism; and (c) Media Spin.

The overall analysis of the political economy of Avian Influenza in Cambodia reveals key challenges, obstacles and opportunities for responding to Avian Influenza—and potentially other global epidemics. For example, one of the reasons given for non-compensation revealed

⁶² In what can only be considered art mimicking life, in late February 2005, the director of the U.S. Centers for Disease Control and Prevention, Dr. Julie Gerberding said 'A problem in a remote part of the world becomes a world problem overnight' (as quoted in Walsh 2005).

the tremendous amount of confusion there was about its effectiveness. How effective is compensation when used elsewhere, and more importantly, in countries neighbouring Cambodia? What we have learned about the bureaucratic politics of the country in light of Avian Influenza has been the need to increase the credibility of MAFF as a partner by building its technical capacity and financial management.⁶³ In some ways, MoH's 'success' has been path-dependent. History determines the future in this sense because money has been directed at MoH and so good financial management begets more money. At the same time, the issue of livelihoods mainstreaming for AI policy was laid bare. Protecting livelihoods should not be *assumed*, but made explicit in the form of 'pro-poor HPAI risk reduction'. Because 90 per cent of poultry is raised in backyard-villages, almost anything achieved with poultry (or livestock) can be considered pro-poor, but this, regrettably, is not necessarily enough to reduce HPAI risks in animals and humans, and thus not of particular interest do donors.

HPAI H5N1 revealed that donors too are motivated by concerns other than protecting livelihoods, just as traditional aid activities are often dominated by the need to tie aid to donor countries, HPAI H5N1 activities have been overtly focused on detecting and preventing pandemic as a threat to the donor countries themselves. Indeed, complacency and lack of foresight both by donors and the authorities is evidenced by their myopic views on using grassroots approaches only for AI, but not for other diseases (such as Newcastle, fowl-pox, and cholera) that occur more frequently. However, ultimate responsibility for the success or failure of policies in Cambodia must rest with those in charge—the authorities themselves—and the lack of good governance and political will speaks for itself in the pervasive institutional failures that have plagued the Political Economy of Avian Influenza in Cambodia. These failures are by no means limited to AI alone, but exhibited themselves richly in the narratives explored. When actions speak louder than words, and authorities have been unable or unwilling to commit State resources, although they eagerly welcome donors' funds to keep AI and Pandemic Preparedness programs going into the near future.

Finally, whether rightly or wrongly, Cambodians, and their government, perceive the risks posed by HPAI to be low. Except for a human case in December 2008, there had not been a single outbreak in either animals or humans since April 2007 (granted, this could be due in part because of pressure imposed by the July 2008 elections and the outcry by villagers whose birds would have to be culled). Cambodia's epidemic waves were mild and the numbers of human cases were few compared to neighbouring countries. In contrast, donors have committed \$35 million to Cambodia, placing it seventh among top 10 recipients of AI funding, fourth in terms of per case and per death from H5N1, and second in terms of per capita and per outbreak funding.

The political economy of AI is complicated and nuanced. As with any changes, there are winners and losers. Machiavelli long ago posited: 'There is nothing more difficult to carry out, nor more doubtful of success, nor more dangerous to handle, than to initiate a new order of things. For the reformer has enemies in all those who profit by the old order, and only lukewarm defenders in all

⁶³ Underscoring the weakness in Cambodia's statistical knowledgebase, participants of a Workshop on Avian Influenza Research Activities in Cambodia that took place 8-9 October 2008 in Sihanoukville underscored '(i) the urgent need for a livestock / agricultural census to obtain current figures on livestock numbers and production in Cambodia; (ii) the lack of information authorities have on cross-border movements of poultry and poultry products and how these could be estimated through indirect assessments; and (iii) the need to 'benchmark' the sensitivity of the current surveillance activities and to test the surveillance and response system by conducting simulation exercises.' (Otte 2008)

those who would profit by the new order.⁶⁴ As has been seen throughout Cambodia's experience, reforms can be influenced internally and externally, but only up to a point, and the process of domestic policymaking is filled with strengths as well as weaknesses. Much more needs to be done to improve institutions and their governance.

⁶⁴ Machiavelli (1996 translated by Sonnino: 49).

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ANNEX 1

Table 1.1: Informant List

Note: The below titles have been generalised to prevent identification of informants. For example, several informants were heads of trade associations, which would make their identities obvious. Also, government officials do not have their ministries listed for the same reason. The number in parenthesis following that informant's title descriptor throughout the text now appears to the left of the below list and is randomly assigned.

Informant
1. Veterinarian and Consultant
2. Veterinarian
3. Economist
4. IO Senior Officer
5. AI Expert (E-mail)
6. AI Expert
7. IO Veterinarian
8. Vice President, agribusiness
9. IO Officers
10. Livestock Expert
11. AI Expert
12. AI Expert
13. AI Expert
14. AI Expert
15. NGO Doctor
16. Donor Staff
17. Donor Staff
18. NGO and IO doctor
19. IO Staff
20. Wet Market Seller
21. Embassy Staff
22. Health Expert
23. Education Expert
24. AI Expert
25. Health Expert
26. Donor Management

Informant
27. Embassy Staff
28. AI Expert
29. NGO Management
30. Livestock Expert
31. Donor Staff
32. Donor Staff and Doctor
33. Government Official
34. Provincial Vet
35. Senior Government Official
36. Livestock Expert
37. NGO Staff
38. AI Expert
39. AI Expert
40. Farmer
41. Government Official
42. NGO Representative
43. NGO Representative
44. Travel Agency Owner
45. Member of Parliament
46. Sister of Member of Parliament
47. Entrepreneur and former Secretary of State
48. Civil servant employee
49. Adviser

Table 1.2: Summary of probable SARS cases with onset of illness from 1 November 2002 to 31 July 2003 (Based on data as of the 31 December 2003.)

Areas	Cumulative number of cases			Median age (range)	Number of deaths ^a	Case fatality ratio (%)	Number of imported cases (%)	Number of HCW affected (%)	Date onset first probable case	Date onset last probable case
	Female	Male	Total							
Australia	4	2	6	15 (1-45)	0	0	6 (100)	0 (0)	26-Feb-03	1-Apr-03
Canada	151	100	251	49 (1-98)	43	17	5 (2)	109 (43)	23-Feb-03	12-Jun-03
China	2674	2607	5327 ^b	Not available	349	7	Not Applicable	1002 (19)	16-Nov-02	3-Jun-03
China, Hong Kong Special Administrative Region	977	778	1755	40 (0-100)	299	17	Not Applicable	386 (22)	15-Feb-03	31-May-03
China, Macao Special Administrative Region	0	1	1	28	0	0	1 (100)	0 (0)	5-May-03	5-May-03
China, Taiwan	218	128	346 ^c	42 (0-93)	37	11	21 (6)	68 (20)	25-Feb-03	15-Jun-03
France	1	6	7	49 (26 - 61)	1	14	7 (100)	2 (29) ^d	21-Mar-03	3-May-03
Germany	4	5	9	44 (4-73)	0	0	9 (100)	1 (11)	9-Mar-03	6-May-03
India	0	3	3	25 (25-30)	0	0	3 (100)	0 (0)	25-Apr-03	6-May-03
Indonesia	0	2	2	56 (47-65)	0	0	2 (100)	0 (0)	6-Apr-03	17-Apr-03
Italy	1	3	4	30.5 (25-54)	0	0	4 (100)	0 (0)	12-Mar-03	20-Apr-03
Kuwait	1	0	1	50	0	0	1 (100)	0 (0)	9-Apr-03	9-Apr-03
Malaysia	1	4	5	30 (26-84)	2	40	5 (100)	0 (0)	14-Mar-03	22-Apr-03
Mongolia	8	1	9	32 (17-63)	0	0	8 (89)	0 (0)	31-Mar-03	6-May-03
New Zealand	1	0	1	67	0	0	1 (100)	0 (0)	20-Apr-03	20-Apr-03
Philippines	8	6	14	41 (29-73)	2	14	7 (50)	4 (29)	25-Feb-03	5-May-03
Republic of Ireland	0	1	1	56	0	0	1 (100)	0 (0)	27-Feb-03	27-Feb-03
Republic of Korea	0	3	3	40 (20-80)	0	0	3 (100)	0 (0)	25-Apr-03	10-May-03

Romania	0	1	1	52	0	0	1 (100)	0 (0)	19-Mar-03	19-Mar-03
Russian Federation	0	1	1	25	0	0	Not Available	0 (0)	5-May-03	5-May-03
Singapore	161	77	238	35 (1-90)	33	14	8 (3)	97 (41)	25-Feb-03	5-May-03
South Africa	0	1	1	62	1	100	1 (100)	0 (0)	3-Apr-03	3-Apr-03
Spain	0	1	1	33	0	0	1 (100)	0 (0)	26-Mar-03	26-Mar-03
Sweden	3	2	5	43 (33-55)	0	0	5 (100)	0 (0)	28-Mar-03	23-Apr-03
Switzerland	0	1	1	35	0	0	1 (100)	0 (0)	9-Mar-03	9-Mar-03
Thailand	5	4	9	42 (2-79)	2	22	9 (100)	1 (11) ^d	11-Mar-03	27-May-03
United Kingdom	2	2	4	59 (28-74)	0	0	4 (100)	0 (0)	1-Mar-03	1-Apr-03
United States	13	14	27	36 (0-83)	0	0	27 (100)	0 (0)	24-Feb-03	13-Jul-03 ^e
Viet Nam	39	24	63	43 (20-76)	5	8	1 (2)	36 (57)	23-Feb-03	14-Apr-03
Total				8096	774	9.6	142	1706		

a. Includes only cases whose death is attributed to SARS.

b. Case classification by sex is unknown for 46 cases.

c. Since 11 July 2003, 325 cases have been discarded in Taiwan, China. Laboratory information was insufficient or incomplete for 135 discarded cases, of which 101 died.

d. Includes HCWs who acquired illness in other areas.

e. Due to differences in case definitions, the United States has reported probable cases of SARS with onsets of illness after 5 July 2003.

Source: WHO (2004)

II. Timeline—Moments

Stylized Timeline of Avian Influenza in Cambodia January 2004-March 2008

01/13/04: The Cambodian government temporarily bans the import of birds and poultry eggs from neighbouring Thailand and Vietnam (Xinhua 2004)

01/23/04: Cambodia detects its first outbreak of avian flu on a farm outside Phnom Penh. At least 3,000 chickens were reported to have died in at least three farms near Phnom Penh (AFP 2004)

- 01/26/04:** 10,000 chickens are culled from the farm outside Phnom Penh where Cambodia had its first avian influenza outbreak (Japan Economic Newswire (JEN) 2004b)
- 01/28/04:** Asian governments, the U.S., E.U and international organizations agree to create an Asia-wide avian influenza veterinary surveillance network (JEN 2004a)
- 01/30/05:** A 25 year-old woman from Kampot province infected with avian influenza dies in neighbouring Vietnam. The woman, whose brother died of similar respiratory problems weeks before but was not tested, sought medical help in neighbouring Vietnam on January 27. She is Cambodia's first confirmed human case.
- 02/10/05:** Cambodia bans the import of live birds and poultry eggs from neighbouring Vietnam and Thailand (JEN 2005a)
- 03/22/05:** A 28 year-old man from Kampot province dies at a Phnom Penh hospital of avian influenza. The man developed symptoms on March 17 and was hospitalized in Phnom Penh on March 21. Health authorities confirm that the deceased man had contact with sick chicken in the area. This is Cambodia's second confirmed case (Associated Press 2005)
- 03/31/05:** The Japanese government donates 30 motorbikes and \$50,226 in cash to assist Cambodia with its emergency avian flu projects (JEN 2005c)
- 04/07/05:** An 8 year-old girl from Kampot province dies of Avian Influenza. The girl fell ill after having contact with sick poultry. She is Cambodia's third confirmed case (JEN (2005d)
- 04/19/05:** A 20 year-old woman from Kampot province dies of Avian Influenza. The woman was from the same district as Cambodia's first confirmed case. The woman, a secondary school student, sold chickens part-time (JEN 2005b)
- 09/14/05:** Launching of the International Partnership on Avian and Pandemic Influenza. The Partnership aims to increase global awareness and preparation of avian influenza by bringing together key nations and international organisations (Department of State 2005c; Department of State 2005a)
- 10/11/05:** During his five-nation tour of Southeast Asia, Health and Human Services Secretary Michael Leavitt signs an agreement with Cambodia pledging \$1.85 million in assistance for avian influenza surveillance and capacity building in Cambodia (Department of State 2005b)
- 01/17-18/06:** China, the European Commission and the World Bank co-sponsor an avian influenza international donor conference in Beijing. More than 100 countries attend and \$1.9 billion, including \$1 billion in grants, is pledged, half of which will go to Asia (Japan Times 2006; World Bank 2006c)
- 03/21/06:** A 3 year-old girl from Kampong Speu province died of avian influenza. The child fell ill on March 14 and was hospitalized on March 20th in Phnom Penh. The child

was known to play with chicken and the ill residents had contact with sick birds or with caring for the child. This is Cambodia's fifth confirmed case (JEN 2006a)

- 05/23/06:** Cambodia confirms its first outbreak of avian flu in poultry since December 2004.
- 03/28/06:** Prime Minister Hun Sen asks Cambodian media to increase reports on bird flu to raise local awareness. Speaking at an inauguration of a technical medical school in Phnom Penh, the Prime Minister stated 'I would like to appeal to all media to launch a campaign of public awareness on bird flu.' (JEN 2006b)
- 04/05/06:** A 12 year-old boy from Prey Veng province dies of Avian Influenza. The boy developed symptoms on March 29th and was hospitalized at Calmette Hospital in Phnom Penh on April 4th. He dies the next day. A joint team from the Ministry of Health, WHO, and Pasteur Institute in Cambodia confirm that numerous chicken and ducks in the area died within several weeks of the boy's death. The boy gathered dead chickens for his village (USFN 2006)
- 11/4-6/06:** 'Super Moan' a 'broad-breasted rooster with a familiar red cape and strong opinions about healthy behaviours' is introduced by the Academy for Educational Development at the National Water Festival in Phnom Penh.
- 11/07/06:** BBC Two broadcasts a scenario in which 'Eav Chhun', a fictional character who is a labourer, travels upcountry, picks-up H5N1 or a mutation thereof, and Cambodia is ground zero for the next global pandemic (BBC 2006)
- 04/06/07:** Cambodian Ministry of Health announces that a 13 year-old girl from Ponhea Kreak district in Kampong Cham province dies of avian influenza. The girl developed symptoms on April 2nd and was hospitalized on April 3rd. The girl is reported to have consumed a dead chicken before developing symptoms. This is the first confirmed case in Cambodia in 2007 and the last confirmed case as of date (JEN 2007)
- 07/13/07:** The Food and Agriculture Organization holds a series of three training courses in Phnom Penh to train Village Animal Health Workers from 24 provinces in Cambodia on surveillance of bird flu and outbreak response (Xinhua 2007b). A total of 4,703 out of 13,413 VAHWs are eventually trained through July 2007 (Cereno 2008: 11)
- 08/01/07:** Australia announces it will provide up to \$6 million for community awareness and surveillance projects in mainland Southeast Asia, including Cambodia, to combat avian influenza (Bernama 2007)
- 09/27/07:** MEDiCAM, with the support of the Food and Agriculture Organization of the United Nations (FAO), organises a community forum in Mondulkiri near the border of Vietnam to educate rural and remote communities about avian influenza. The forum, the first of a series, is meant to provide avian influenza education to isolated communities with limited or zero access to television and radio (Xinhua 2007a)

- 09/27/07:** Cambodia and the U.S. government sign a bilateral agreement whereas the U.S., through USAID, will provide the Cambodian government with \$5 million to combat avian influenza over the course of the following year (USFN 2007)
- 10/17/07:** The FAO announces that the U.S., via USAID, will contribute \$38 million for FAO's global avian influenza control and prevention program, bringing the total U.S. contribution to the organisation's Avian influenza program to \$63 million. \$1.9 million from the new grant is earmarked for Cambodia to support the Ministry of Agriculture, Forestry, and Fisheries to combat avian influenza in domestic poultry and waterfowl for the next two years. The money will be used primarily to augment the country's surveillance efforts (FAO 2007a)
- 02/15/08** As of this date, Cereno (2008: 12) reports that 5,405 VAHWs and 578 Village Chiefs have been trained: 'Following informal communication between FAO and DAHP, it was agreed to train 8000 VAHWs. Therefore, as of now, 66 per cent of VAHWs and 4 per cent (570 out of 13,794) of VCs are trained.'
- 03/27/08:** World Bank Group approves a \$6 million grant to support Cambodia's national avian influenza plan. The grant will finance the Avian and Human Influenza Control and Preparedness Emergency Project (AHICPEP), which was designed to support the country's Comprehensive Avian and Human Influenza (AHI) National Plan. In addition to this grant, Japan and the AHI facility, a multi-donor organisation consisting of the European Commission and eight other nations, provided \$3 million and \$2 million respectively (World Bank 2008a) The project aims to support the implementation of the Cambodia Comprehensive AHI National Plan, contributing to minimize the threat posed to humans and the poultry sector by an AHI infection in Cambodia, and to prepare for, control and respond (if necessary) to a human influenza pandemic.

Table 1.3: Main Recipients by Rank (as of 10 September 2008)

Country	Commitments, US\$ millions	Rank	Pop*, millions	Commitments per capita, \$	Rank	Poultry Outbreaks**	Commitments per outbreak, \$	Rank
Indonesia	128	1	226	0.57	6	261	490,421	5
Vietnam	115	2	85	1.35	4	2,499	46,018	9
Nigeria	58	3	148	0.39	7	65	892,308	3
Turkey	46	4	74	0.62	5	219	210,046	7
Romania	41	5	22	1.90	3	163	251,534	6
India	37	6	1,123	0.03	8	50	740,000	4
Cambodia	35	7	14	2.42	2	20	1,750,000	2
Lao PDR	28	8	6	4.78	1	12	2,333,333	1
Bangladesh	25	9	159	0.16	10	286	87,413	8
Egypt	20	10	75	0.27	9	1,084	18,450	10

Country	Human Cases***	Commitments per human case,	Rank	Human Deaths***	Commitments per human	Rank
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		\$			death, \$	
Indonesia	137	934,307	7	122	1,049,180	6
Vietnam	106	1,084,906	6	52	2,211,538	5
Nigeria	1	58,000,000	1	1	58,000,000	1
Turkey	12	3,833,333	5	4	11,500,000	3
Romania	0	N/A	9	0	N/A	8
India	0	N/A	10	0	N/A	9
Cambodia	7	5,000,000	4	7	5,000,000	4
Lao PDR	2	14,000,000	3	2	14,000,000	2
Bangladesh	1	25,000,000	2	0	N/A	10
Egypt	50	400,000	8	22	909,091	7

Notes: Commitments from Jonas (2008: 13)

* Population data from World Development Indicators Online

** Outbreaks of Avian Influenza (subtype H5N1) in poultry from the end of 2003 to 15 October 2008 as reported to OIE (2008)

*** Cumulative number of confirmed human of and deaths from Avian Influenza A/(H5N1) as of 10 September 2008 as reported to WHO (2008)

N/A where denominator is zero, ranking based on nominator (commitments)

Source: Author's calculations and rankings based on above sources.

Table 1.4: NGOs and INGOs Involved in AI Control Activities As Shown in MEDiCAM's Database

Non-Governmental Organizations with activities in AI:

1. 3SPN-Sesan Srepok, and Sekong Rivers Protection Network
2. AARR-Alliance Association For Rural Restoration
3. ABI-Association for Business Initiative
4. ABiC-Agri Business Institute Cambodia
5. ACWND-Amara Cambodia women`s Network for Development
6. ADA-Agricultural Development Action
7. ADHOC-Association For Development and Human Rights of Cambodia
8. ADOVIR-Association for Development and Over Villager's Right
9. AFEC-Association Avenir des Femmes et des Enfants du Cambodge
10. AFH-Action For Health AFS
AHI-Asian Health Institute AK
AK-Anakot Kumar
11. AOC-Asian Outreach Cambodia
12. AS-Aphivat Strey
13. ASPFD-Association Saving Poor Family For Development
14. BD-Buddhism and Democracy
15. BDASE-Buddhist Development Association and Supporting Environment
16. BFD-Buddhism For Development
17. BK-Bandos Komar
18. BPS-Buddhism for a Progressive Society
19. BSA-Buddhism Study Association BTB
20. BWAP-Battambang Women AIDS project
21. CAAFW-Cambodian Organisation for Assistance to Families and Widows
22. CAMA Services
23. CAMT-Community Assistant Mobile Team

24. CARDH-Cambodian Association for Rural Development and Health
25. CASF-Cambodia art and Scholarship Foundation
26. CATA-Cambodia Anti-Tuberculosis Association
27. CBCDO-Cambodia Border Community Development Organization
28. CC Home-Cambodia Children's Home
29. CCC-Cooperation Committee For Cambodia
30. CCFC-Christian Care for Cambodia
31. CCI-Cambodia Corps. Inc.
32. CCMHS-Cambodian Community Mental Health Services
33. CCN-Community Cooperation Network
34. CDA-Children Development Association
35. CDFC-Communication Development for Children
36. CDK-Christ for Development Kampuchea
37. CDP-Cambodian Defenders Project
38. CDP-Commune Development Plan
39. CED-Commune Economic Development
40. CEPA-Community Environment protection and Culture
41. CFDS-Cambodia Family Development Services
42. CFEDA-Cambodian Family Economic Development Association
43. CFI-Community Forestry International
44. CGA-Cambodian Global Action
45. CHC-Cambodian Health Committee
46. CHEC-Cambodian HIV/AIDS Education and Care
47. CHED-Cambodian Health Education Development
48. CHHRA-Cambodian Health and Human Rights Alliance
49. CHRD-Cambodian Human Resource Development
50. CIC-Community Information Center
51. CIDO-Community-base Integrated Development Organization
52. CMSSO-Cambodian Medical Services Support Organization
53. CNGON-Cambodian NGO Network
54. CODAC-Co-operative Development Agriculture Organization of Cambodia
55. COHD-Cambodia Organization for Human and Development Concern
56. CORE-Community Operation For Ribase Right Base Empowerment
57. CPC-Cambodia Population Community
58. CSCS-Cooperation for a Sustainable Cambodian Society
59. CSDA-Cambodia Social Economic Development and Democracy Association
60. CSID-Community Support improve Development
61. CTR-CHET THOR
62. CVD-Cambodian Vision in Development
63. CWARS-CWARS
64. CWPD-Cambodian Women for Peace and Development
65. CYK-Caring For Young Khmer
66. DDSP-Disability Development Services Pursat
67. DEEP-Developpement & Education pour L'Eau Potable
68. DFP-Development Family Program
69. DOPD-Development Organization For Priority Domine
70. DPA-Development and Partnership in Action
71. DPKS-Development Program Khmer Student
72. DSF-Douleurs Sans Frontieres
73. DYMB-Dhammayietra Mongkol Borei
74. EDCO-Economic Development Community Organization
75. EPDO-Environmental Protection Development Organization
76. ESTHER-Ensemble pour une solidarit  Therapeutique Hodpitalice en R'seau

77. FCOP-Four Square Children of Promis
78. FLD-Farmer Leading Development
79. HACC-HIV/AIDS Coordinating Committee
80. HAD-Hope Association for Development
81. Hi-Free-The Human Inborn Freedom
82. HOSCD-Health Care Organization for Social and Community Development
83. HRVC-Human Right Vigilance of Cambodia
84. HU-Health Unlimited
85. HURREDO-Human Resource and Rural Economic Development Organization
86. ICC-International Cooperation Cambodia
87. IDE-International Development Enterprise
88. ILDO-Islamic local Development organization
89. IRD-International Relief and Development
90. IRIS-International Resource for the Improvement of Sight
91. KAFDOC-KAFDOC
92. KAWP-Kroum Aphiwatt Phume
93. KFD-Khmer Farmer Development
94. KHANA-Khmer HIV/AIDS NGO Alliance
95. KHEN-Kien Kos Health Education Network
96. KMR-Komar Rikreay Association
97. KNCED-Khmer National Community Economic Development
98. KNT-Kunathor Organization
99. KNTO-Kumnith Thmey Organization
KRDA-Khmer Rural Development Association
100. LHA-The Life of Hope Association
101. MC-MEDI CORPS
102. MED-Mekong Eye Doctors
103. MI-Malteser Internnational
104. MPK-Meahto Phum Komah
105. NH-New Humanity
106. NOMAD-Nomad Researcher et Soutien International
107. NTFP-Non-timber Forest Products Project
108. NYEMO-Nyemo Cambodia NGO
109. Ockenden Cambodia
110. OEC-Operation Enfant du Cambodge
111. PATH-Program for Appropriate Technology in Health
112. PK-Ponleur Komar
113. PKO-Puthi Komar Organization
114. PPS-Phare Ponleu Selpak
115. PTD-Street Families Center "Pieateuk Dong"
116. PVT-Prom Vihear Thor
117. RACHA-Reproductive and Child Health Alliance
118. RAHDO-Rural Animal Health Development Organization
119. RCEDO-Rural Community and Environment Development Organisation
120. RCEDO-Rural Community and Environment Development organization
121. RDA-Rural Development Association
122. RDCNRM-Ratanakiri Development and community Based Natural Resource Management
123. RDPC-Rural Development Program of Cambodia
124. READA-Rural Economic and Agriculture Development Agency
125. RFCD-Rural Friend Community of Development
126. RHB-Radana Handicrafts Battambang
127. RNSP-Ratanakiri Network Support Project (a project at community Forestry International RWC-RainWater Cambodia
128. Saboras
129. SARF-Support Association For Rural Farmers.
130. SC-Sustainable Cambodia

- 131. SCC-Salvation Centre
Cambodia
- 132. SCC-SR-Salvation Centre
Cambodia - Siem Reap
- 133. SDR-Social Development in
Rural
- 134. SEADO-Social Development
Environment and Agriculture
- 135. SEVA-Seva-Foundation
Cambodia
- 136. SHARE Cambodia-Service
For the Health in Asian and African
Regions – Cambodia
- 137. SHCH-Sihanouk Hospital
Center of Hope
- 138. SKO-Sprouting Knowledge
Orphan
- 139. SKT-Samakithor
- 140. SOS-Spirit Of Soccer
- 141. SUMH-Supporters for
Mental Health
- 142. SVA-Shanti Volunteer
Association
- 143. SWDC-Stung Treng
Women's Development Center
- 144. TCF-Trauma Care
Foundation Cambodia
- 145. TDSP-Toek Dey Sovann
Phuom Teuk Saat-Teuk Saat
- 146. TNL-C-The New Life
Cambodia
- 147. TTA-Tean Thor Association
- 148. VAPSD-Vocational Training
for Alleviation of Poverty and Social
Development
- 149. VKP-Virakpheap Komar
- 150. VODP-Volunteer
Organization for Development of
the Poor
- 151. VPS-Vulnerable People
Support
- 152. VSG-Village Support Group
- 153. VTH-Vulnerable Teenager
for Help
- 154. WACD-Women Association
Community Development
- 155. WCRD-Women Children
Right Development
- 156. WODAC-Women in
Development And Community
- 157. WOMEN-Women
Organization Modern Economic and
Sanitation
- 158. WP-Watanac Pheap
- 159. WYA-Women Youth And
Action
- 160. YCC-Youth Council
Cambodia
- 161. YWAM-Youth with A Mission

Table 1.5: Avian Influenza and Pandemic Preparedness Funding Matrix Cambodia 2008-2009 *

Implementing Partner/ Ministry	Animal health			Human health			Information, education, communication (IEC) **			Pandemic preparedness			Resources total	Donor source(s) and timeframe
	Resources required	Resources secured	Finance gap	Resources required	Resources secured	Finance gap	Resources required	Resources secured	Finance gap	Resources required	Resources secured	Finance gap		
ADPC Asia Disaster Preparedness Center							560 000	560 000	0				560 000	ADB Nov 07-Aug 08
AED Academy for Education and Development							1 575 000	1 575 000	0				1 575 000	USAID Sept 07-Oct 08
CARE CARE International Cambodia							776 200	776 200	0				776 200	AusAid Mar 07-Jun 08 (\$391 200) US-CDC Sep 07-Sep 08 (\$385 000)
CRC Cambodia Red Cross							419 876	419 876	0				419 876	IFRC+Finland RC Apr 07-Mar 08 Apr 08-Mar 10 being negotiated
FAO Food and Agriculture Organisation	4 565 000	3 120 000	1 445 000										3 120 000	Germany Nov 07-Mar 09 (\$1 220 000) USAID Oct 07-Sep 08 (\$1 900 000)
MAFF*** Ministry for Agriculture, Forestry and Fisheries	5 800 000	5 800 000	0										5 800 000	WB Jul 08-Jul 11 (TBC)
MEDICAM Organisation for health related NGO's														
MoH*** Ministry of Health				2 343 000	2 343 000	0							2 343 000	WB Jul 08-Jul 11 (\$2 043 000) TBC US-CDC 07-08 (\$300 000)
NCDM*** National Committee for Disaster Management										1 700 000	1 700 000	0	1 700 000	WB Jul 08-Jul 11 (TBC)
Pasteur Institute				600 000	600 000	0							600 000	US-CDC 07-08 (\$300 000) USCDC 08-10 (\$300 000)
RHAC Reprod. Health Association Cambodia				265 000	265 000	0							265 000	USAID 08-09
UNICEF United Nations Children's Fund							1 700 000	1 700 000	0				1 700 000	AusAid Apr 07-Mar 08 (\$1 200 000)

														Japan Apr 07-Mar 08 (\$500 000)
US NAMRU US Naval Medical Research Unit				230 000	230 000	0							230 000	US-CDC 07-08
WHO World Health Organisation				3 282 812	2 760 512	522 300				794 000	377 861	416139	3 138 373	Japan Jan 08-Dec 08 (\$665 000) USCDC Oct 07-Sep 08 (\$764 472) AusAid May 07-Apr 08 (\$230 427) CIDA Oct 07-Sep 08 (\$21 474) WB Jul 08-Jul 11 (\$1 457 000)TBC
WCS Wildlife Conservative Society	24 457	24 457	0										24 457	USAID 07-08
Total	10 389 457	8 944 457	1 445 000	6 720 812	6 198 512	522 300	5 031 076	5 031 076	0	2 494 000	2 077 861	416139	22 251 906	

* Resources include ongoing programmes that started in 2006-2007. Resource does not include inkind contributions

** Includes cross-sectoral research and cross-sectoral community based approaches

***Parts of these funds will be implemented directly by UN agencies but agreements are not finalized

ANNEX 2

Table 2.1: Content Analysis of Nearly 160 Avian Influenza Bulletins

Date	Issue No.	Organisation	Animal Health: Hotline Calls	Human Health: Hotline Calls *out = call back*	Text Messages	Samples Tested for AI in Animal	Suspected AI Humans (with tests run at the Pasteur Institute)	Culled Poultry
05/10/05	1	FAO				samples negative (unspecified number)	1+ (died on April 7, 2005)	
05/17/05	2	FAO				n/a	n/a	
05/24/05	3	FAO				460-	samples were negative	
05/31/05	4	FAO and WHO				n/a	2-	
06/06/05	5	FAO and WHO		3 to 4 per day		samples collected	3-	
06/14/05	6	FAO and WHO				137-	350-, 2- (previous week)	
06/21/05	7	FAO and WHO	2			3-, 124-	1-	
06/28/05	8	FAO and WHO		3 to 4 per day		57-	358- *2 positive for H3N2	
07/05/05	9	FAO and WHO					43-	
07/12/05	10	FAO and WHO		1 to 2 per day		farmers resist collecting samples	5 positive for H3N2	
07/19/05	11	FAO and WHO		0		samples negative (unspecified number)	1-	
07/26/05	12	FAO and WHO				157-	2-	
08/02/05	13	FAO and WHO		6		samples negative (unspecified number)	1-	
08/09/05	14	FAO and WHO		7		340 (no definitive results posted)	1- *did not meet case	

Date	Issue No.	Organisation	Animal Health: Hotline Calls	Human Health: Hotline Calls *out = call back*	Text Messages	Samples Tested for AI in Animal	Suspected AI Humans (with tests run at the Pasteur Institute)	Culled Poultry
08/16/05	15	FAO and WHO		1		51-	1-	
08/23/05	16	FAO and WHO				5+, 15-	n/a	
08/30/05	17	FAO and WHO				3-	n/a	
09/06/05	18	FAO and WHO		0		184* (28 sera + for HI)		
09/13/05	19	FAO and WHO		0		29- (but 23 positive for antibodies for H1N1)		
09/20/05	20	FAO and WHO						
09/27/05	21	FAO and WHO				3-	1-	
10/06/05	22	FAO and WHO						
10/13/05	23	FAO and WHO				267-	3-	
10/20/05	24	FAO and WHO				n/a	n/a	
10/27/05	25	FAO and WHO				n/a	n/a	
11/03/05	26	FAO and WHO		12		n/a	3-	
11/10/2005	27	FAO and WHO		unspecified #		4-	2-	
11/24/2005	28	FAO and WHO				3-	5-	
12/1/2005	29	FAO and WHO		unspecified #		1-	1-	
12/8/2005	30	FAO and WHO				25-, other samples negative but unspecified amount	2-	
12/15/2005	31	FAO and WHO		unspecified #		30-	1-	
12/22/2005	32	FAO and WHO		unspecified #		39-, 50 (no definitive results posted)	2-	
12/29/2005	33	FAO and WHO		1		170-, 18 (no definitive results posted)		2360
1/5/2006	34	FAO and WHO		unspecified # * MoH notices decrease in calls		48-	1 pending	

Date	Issue No.	Organisation	Animal Health: Hotline Calls	Human Health: Hotline Calls *out = call back*	Text Messages	Samples Tested for AI in Animal	Suspected AI Humans (with tests run at the Pasteur Institute)	Culled Poultry
1/12/2006	35	FAO and WHO					1-	
1/19/2006	36	FAO and WHO				60-		
1/26/2006	37	FAO and WHO		0		75-		
2/2/2006	38	FAO and WHO	24	17		30-	1 (no definitive results posted)	
2/9/2006	39	FAO and WHO	20	21		30-, other samples negative but unspecified amount	2-	
2/16/2006	40	FAO and WHO				30-		
2/23/2006	41	FAO and WHO	8	9		270-	1-	
3/2/2006	42	FAO and WHO	6	15			1-	
3/9/2006	43	FAO and WHO	6	17		75-	13-	235
3/23/2006	44	FAO and WHO		17		63-	4-	
3/30/2006	45	FAO and WHO	16	77		3+, 15-, 95 (33 ducks had a positive serological result, and 1 duck and 1 chicken tested positive for H5N1 virus), 30-	1+ (died), 66-	162
4/10/2006	46	FAO and WHO	13	440			1+ (died) *6th confirmed person with AI in Cambodia. 2nd case AI detected in Cambodia	
4/13/2006	47	FAO and WHO	15	340		288-, *75 duck were serologically positive for AI, all swab samples were negative for H5N1 virus—	21-	

Date	Issue No.	Organisation	Animal Health: Hotline Calls	Human Health: Hotline Calls *out = call back*	Text Messages	Samples Tested for AI in Animal	Suspected AI Humans (with tests run at the Pasteur Institute)	Culled Poultry
						suggesting that the ducks were exposed in the past but were not currently infected with the virus.		
	48							
	49							
5/4/2006	50	FAO and WHO	22	120		99-	7-, *3 positive for H1N1	
5/11/2006	51	FAO and WHO	10	280		56-	6- *1 tested positive for H1N1	
5/18/2006	52	FAO and WHO	7	160		5-	0-	
	53							
	54							
	55							
6/16/2006	56	UN System in Cambodia	32	100		3-	4-	
6/22/2006	57	UN System in Cambodia	15	231		3-	3-	
6/30/2006	58	UN System in Cambodia	28	70	60	2-	1-	
7/7/2006	59	UN System in Cambodia	25	70		1-	0	
7/13/2006	60	UN System in Cambodia	28	60		12-	1-	
7/21/2006	61	UN System in Cambodia	32	55		31-	0	
7/29/2006	62	UN System in	37	70		28-	0	

Date	Issue No.	Organisation	Animal Health: Hotline Calls	Human Health: Hotline Calls *out = call back*	Text Messages	Samples Tested for AI in Animal	Suspected AI Humans (with tests run at the Pasteur Institute)	Culled Poultry
		Cambodia						
8/4/2006	63	UN System in Cambodia	45	90		61-	2-	
8/11/2006	64	UN System in Cambodia	50	100		178-	1- *case excluded	
8/18/2006	65	UN System in Cambodia		90			2-	398
8/25/2006	66	UN System in Cambodia	15	130		18-, 9+, 121-	4-	813
9/1/2006	67	UN System in Cambodia	10	130		150 tests, 5 of 50 duck swabs were positive to Newcastle Disease	5-	
9/8/2006	68	UN System in Cambodia	15	105		367 tests, Balaing Village 5+, 3:12 duck organ+, 2:70 duck sera +	7-	331
9/15/2006	69	UN System in Cambodia	8	90		249-	0	
9/21/2006	70	UN System in Cambodia	14	90		133-	3-, 21-	
9/28/2006	71	UN System in Cambodia	11	90		63-	3-	
10/6/2006	72	UN System in Cambodia	10	69		119-	3- * did not meet clinical case, 1 admitted to hospital but was not seen by medical staff	

Date	Issue No.	Organisation	Animal Health: Hotline Calls	Human Health: Hotline Calls *out = call back*	Text Messages	Samples Tested for AI in Animal	Suspected AI Humans (with tests run at the Pasteur Institute)	Culled Poultry
10/13/2006	73	UN System in Cambodia	6	40		106-	0	
10/20/2006	74	UN System in Cambodia	9	65		119-	2-	
10/27/2006	75	UN System in Cambodia	19	59		201-	0	
11/3/2006	76	UN System in Cambodia	16	53		12-	4-	
11/13/2006	77	UN System in Cambodia	16	38		50-	0	
11/17/2006	78	UN System in Cambodia	20	50	25	187-	0	
11/24/2006	79	UN System in Cambodia	22	32	14	283-	0	
12/1/2006	80	UN System in Cambodia	19	57		100-	2-	
12/8/2006	81	UN System in Cambodia	14	65		100-	1-, but flu A	
12/15/2006	82	UN System in Cambodia	49	60		56-	0	
1/5/2007	83	UN System in Cambodia	38	40		168-	1- sought health in VN	
1/12/2007	84	UN System in Cambodia	23	77		61-	1-	
1/19/2007	85	UN System in Cambodia	21	67		122-	0	
1/26/2007	86	UN System in	25	70		123-	9-	

Date	Issue No.	Organisation	Animal Health: Hotline Calls	Human Health: Hotline Calls *out = call back*	Text Messages	Samples Tested for AI in Animal	Suspected AI Humans (with tests run at the Pasteur Institute	Culled Poultry
		Cambodia						
2/2/2007	87	UN System in Cambodia	14	72		114-	3-	
2/9/2007	88	UN System in Cambodia	15	82		117-	2-	
2/16/2007	89	UN System in Cambodia	10	65	18		4-	
3/1/2007	90	UN System in Cambodia	14	35	18	112-	0	
3/9/2007	91	UN System in Cambodia	15	40	14	137-	0	
3/16/2007	92	UN System in Cambodia	10	77		61-	2-	
3/26/2007	93	UN System in Cambodia	10	85		118-	0	
4/2/2007	94	UN System in Cambodia	23	52		127-	1-	
4/6/2007	95	UN System in Cambodia	20	75		50-	1+ *first death in 2007, 1-	
4/12/2007	96	UN System in Cambodia	22	80		5+, 35-	10-	784
4/27/2007	97	UN System in Cambodia	52	53		16-	0	
5/7/2007	98	UN System in Cambodia	20	35		8-	1-	
5/17/2007	99	UN System in Cambodia	23	49		7-	0	

Date	Issue No.	Organisation	Animal Health: Hotline Calls	Human Health: Hotline Calls *out = call back*	Text Messages	Samples Tested for AI in Animal	Suspected AI Humans (with tests run at the Pasteur Institute)	Culled Poultry
5/21/2007	100	UN System in Cambodia	19	46		3-	0	
5/25/2007	101	UN System in Cambodia	22	34		12-	0	
6/1/2007	102	UN System in Cambodia	18	14		0	0	
6/8/2007	103	UN System in Cambodia	16	25		5-	1-	
6/15/2007	104	UN System in Cambodia	22	31		7-	5-	
6/22/2007	105	UN System in Cambodia	13	35		8-	1-	
7/2/2007	106	UN System in Cambodia	11	35		18-	4-	
7/9/2007	107	UN System in Cambodia	10	31	12	7-	0	
7/16/2007	108	UN System in Cambodia	15	35, 38 out		33-	2-	
7/20/2007	109	UN System in Cambodia	20	51, 70 out		4-	1-	
7/27/2007	110	UN System in Cambodia	15	33, 34 out		37-		
8/6/2007	111	UN System in Cambodia	14	30, 37 out		21-	1-	
8/10/2007	112	UN System in Cambodia	17	32, 43 out, 19 missed	14	16-	1-	
8/17/2007	113	UN System in	13	27, 35 out	22	22-	0	

Date	Issue No.	Organisation	Animal Health: Hotline Calls	Human Health: Hotline Calls *out = call back*	Text Messages	Samples Tested for AI in Animal	Suspected AI Humans (with tests run at the Pasteur Institute)	Culled Poultry
		Cambodia						
2/24/2007	114	UN System in Cambodia	11	35, 38 out	17	20-	0	
8/31/2007	115	UN System in Cambodia	19	36, 33 out		23-	0	
9/7/2007	116	UN System in Cambodia	15	45, 32 out		20-	2-	
9/14/2007	117	UN System in Cambodia	13	37, 33 out		227-	1-	
9/21/2007	118	UN System in Cambodia	10	with report 119 57, 37 out		13-	0	
9/28/2007	119	UN System in Cambodia	15	with report 118 57, 37 out		36-	1-	
10/5/2007	120	UN System in Cambodia	12	27, 35 out		30-	0	
10/22/2007	121	UN System in Cambodia	40	22, 24 out		48-	2-	
10/26/2007	122	UN System in Cambodia	28	27, 3 out		16-	0	
11/2/2007	123	UN System in Cambodia	18	17, 34 out		9-	2-	
11/9/2007	124	UN System in Cambodia	14	19, 10 out		1-	0	
11/16/2007	125	UN System in Cambodia	12	22, 33 out		13-	4-	
11/22/2007	126	UN System in Cambodia	10	17, 22 out		7-	3-	

Date	Issue No.	Organisation	Animal Health: Hotline Calls	Human Health: Hotline Calls *out = call back*	Text Messages	Samples Tested for AI in Animal	Suspected AI Humans (with tests run at the Pasteur Institute)	Culled Poultry
11/30/2007	127	UN System in Cambodia	14	24, 36 out		23-	0	
12/7/2007	128	UN System in Cambodia	12	17, 15 out		4-	2-	
12/14/2008	129	UN System in Cambodia	11	15, 20 out			2-	
12/21/2007	130	UN System in Cambodia	11	11, 16 out		5-	1- *case excluded	
12/28/2007	131	UN System in Cambodia	10	13, 16 out		6-	1-	
1/4/2008	132	UN System in Cambodia	8	18, 19 out		5-	0	
1/11/2008	133	UN System in Cambodia	10	24, 18 out		0	1-	
1/18/2008	134	UN System in Cambodia	11	22, 16 out		3-	1-	
1/25/2008	135	UN System in Cambodia	9	15, 17 out		14-	0	
2/1/2008	136	UN System in Cambodia	14	16, 18 out		6-	1-	
2/8/2008	137	UN System in Cambodia	29	16, 18 out		3-	1-	
2/15/2008	138	UN System in Cambodia	22	20, 15 out		4-	12-	
2/22/2008	139	UN System in Cambodia	20	18, 15 out		20-	0	
2/29/2008	140	UN System in	12	13, 10 out		8-	1- *case excluded	

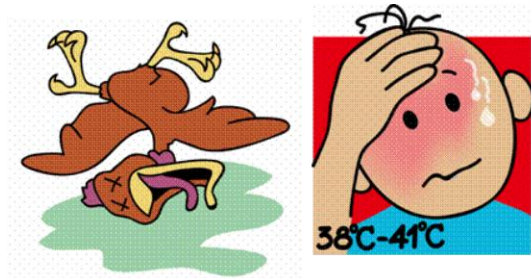
Date	Issue No.	Organisation	Animal Health: Hotline Calls	Human Health: Hotline Calls *out = call back*	Text Messages	Samples Tested for AI in Animal	Suspected AI Humans (with tests run at the Pasteur Institute	Culled Poultry
		Cambodia						
3/7/2008	141	UN System in Cambodia	14	22, 16 out		samples negative (unspecified number)	0	
3/14/2008	142	UN System in Cambodia	11	19, 20 out		3-	0	
3/21/2008	143	UN System in Cambodia	8	21, 19 out		3-	0	
3/28/2008	144	UN System in Cambodia	16	12, 8 out		1-	0	
4/4/2008	145	UN System in Cambodia	12	20, 15 out		7-	0	
4/11/2008	146	UN System in Cambodia	24	24, 16 out			2-	
4/18/2008	147	UN System in Cambodia	no reports	25, 20 out		no update this week	0	
4/25/2008	148	UN System in Cambodia	27	35, 22 out		19-	0	
5/2/2008	149	UN System in Cambodia	12	28, 23 out		8-	1- *case excluded	
5/9/2008	150	UN System in Cambodia	8	30, 20 out		8-	1-	
5/16/2008	151	UN System in Cambodia	6	33, 13 out		10-	0	
5/23/2008	152	UN System in Cambodia	10	32, 16 out		7-	1-	
5/30/2008	153	UN System in Cambodia	13	32, 18 out		4-	1-	

Date	Issue No.	Organisation	Animal Health: Hotline Calls	Human Health: Hotline Calls *out = call back*	Text Messages	Samples Tested for AI in Animal	Suspected AI Humans (with tests run at the Pasteur Institute	Culled Poultry
6/6/2008	154	UN System in Cambodia	12	22, 20 out		10-	0	
6/13/2008	155	UN System in Cambodia	11	27, 15 out		9-	1-	
6/20/2008	156	UN System in Cambodia	12	15, 12 out		5-	3-	
6/27/2008	157	UN System in Cambodia	10	32, 25 out		9-	1-	
7/4/2008	158	UN System in Cambodia	8	35, 28 out		4-	3-	
7/11/2008	159	UN System in Cambodia	11	39, 33 out		9-	0	
7/18/2008	160	UN System in Cambodia	7	40, 34 out		14-	1-	
Totals			1936*	5004*				
Average per issue			12.1**	31.275**				

Note: *At least given missing issues and imprecise data; **160 issues used as denominator.

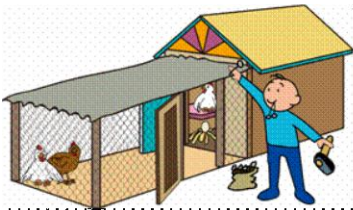
Source: Nearly 160 *Avian Influenza Bulletins* (10/05/05-18/07/08) were content analyzed by author; the ones missing in this period could not be found by the UN Resident Coordinator's Office.

Figure 2.1: WHO FAO UNICEF AD HOC MEETING, 14-16 March 2006: Summary and Recommendations of the Meeting



REPORT

SEPARATE



WASH



COOK



Source: WHO FAO UNICEF meeting summary notes

Table 2.2: Data for Cambodia

National facts and figs	Total population *	14,350,860 (2006, WDI)
	Total land area (km2) *	176,520 (2006, WDI)
	First H5N1 outbreak *	01/12/04: Pong Peay / Last: 04/06/07: Kampong Cham (dom. poultry, wild birds) according ECTAD HPAI Situation Update February 22, 2008 Issue No. 270
	First human death, nos to date *	01/30/2005, 7 (WHO 2008)
	Numbers of poultry *	Circa 16 million (PowerPoint Presentation) More than 90% of poultries are backyard chickens and ducks. Around 2 millions village households raise backyard chickens. Estimation of backyard chickens in Cambodia is around 15 million heads. According last census (November 2004), there are: - 52 layer commercial farms (total of 206,000 heads) - 92 broiler commercial farms (total of 422,000 heads) - 331 ducks commercial farms (total of 300,000 heads) / closely depending of the season.
	Poultry export value *	None. Cambodia does not export poultry or poultry products. (FAO, TCP/RAS/3010)
	Structure of industry (1-4)	Not entirely sure what 1-4 refers to, perhaps monopoly, etc...
	National GDP *	\$7,192,591,000 (current US\$, 2006)
	Agriculture as % of GDP (poultry industry as % of agric GDP) *	34.19% (2006); "Livestock account for approximately 20% of overall GDP and 35% of agricultural GDP in both Cambodia and Laos. The population of cattle and buffaloes is approximately 2.5 million in Cambodia and 2 million in Laos, with an annual increase of about 5% for cattle and 0.75% for buffalo in Laos between 1980 and 2000 as the demand for meat is growing rapidly in south-east Asia. With the majority of large ruminant livestock in Cambodia and Laos held by small village producers and up to 25% of cattle currently exported, an opportunity to increase production and address rural poverty exists." http://www.vetsci.usyd.edu.au/research/farmanimal_health/projects_other.shtml "Within the livestock sub-sector, poultry and swine production have each grown at just over 2 percent per annum, slightly higher than the rate of large ruminant production (1.7 percent). In value terms, poultry is still the smallest of these three livestock activities, and an outbreak of avian influenza is unlikely to exert a large negative impact on overall growth of the sub-sector, although a pandemic could exert a very negative impact on tourism." http://siteresources.worldbank.org/INTCAMBODIA/Resources/293755-1139523419190/Chapter4.pdf

	Aid dependency (% GDP) *	In 2004, approximately US\$ 555.4 million of ODA was disbursed, equivalent to 11% of gross domestic product (with an estimated nominal GDP of US\$ 4.9 billion for 2004). While ODA has increased somewhat since then, GDP growth has been dramatic. Thus, the country is less aid dependent now if measured as % GDP than it was four years ago.
Risk, uncertainty, perceptions	Major hazards/disasters in last decade (dates)	Cambodia: Drought - Aug 2002; Cambodia: Floods - Aug 2000; Cambodia: Floods - Aug 2001; Cambodia: Floods - Aug 2002
	Framing or risk/uncertainty in policy	While the authorities have played along—mainly because bird flu means more aid money—even they know that the risk has been overblown.
	Social constructions of risk and uncertainty by public	Bird Flu is ignored in urban areas; seen as a rural (if at that) problem. Too few people have actually died from the disease to make it much of an issue. Dengue is widely known to cause more deaths
	Media coverage of avian influenza	Heavy media coverage perceived actual may be different.
Politics, governance and political culture	Styles of decision-making in bureaucracy	Ruling party decides; bureaucracy is ineffective
	Patronage politics and influence on policy	Extremely strong patronage politics, policy meaningless at times
	Form of democracy – role of civil society	Constitutional monarchy, where King reigns but does not rule – civil society is weak
	State structure – level of decentralisation	Some local governance, but little financial decentralization
	Regulatory cultures/styles	Top-down
HPAI response	Major donors/international agencies involved in avian influenza (rank?)	FAO, WHO, UN/World Bank, OIE, USAID, Centers for Disease Control, US Department of Agriculture, Unicef, AusAID, International Organisation of Migration, MPAT TE 14 Exercise co-hosted by the US Pacific Command and the Royal Cambodian Armed Forces (RCAF) on testing response capacity for natural disasters and pandemic influenza, Germany, APEC, ADB
	NGOs, civil society groups involved	MEDICAM (Membership Organization for NGOs Active in Cambodia's health sector), Agronomes et Vétérinaires sans frontières (AVSF), Wildlife Conservation Society (WCS), AED, CARE Cambodia, IFRC, Asia Disaster Preparedness Center, Centre d'Etude et de Développement Agricole Cambodgien (CEDAC)
	Key interventions for HPAI control and response	Inter-Sectoral Technical Working Group (ITWG) 4,700 village animal health workers (VAHWs)

		<ul style="list-style-type: none"> - Do not take/use sick or dead poultry for eating. Eg. Chickens, ducks etc. - Do not touch sick or dead poultry. Eg. Chickens, ducks etc - All poultry meats should be well cooked before eaten. - All sick or dead poultry must be buried or burnt carefully - When anyone has such problem or have the following symptoms; high fever, cough or difficult breathing, please contact to the closest village chiefs or health center staff or through hotlines numbers: 012 488 981 and 012 836 868. <p>The three AI Community Theatre groups reported on in the last bulletin will do 350 performances before Khmer new years</p>
	Areas of government responsible – coordination	<p>National Animal Health and Production Investigation Center (NAHPIC), Ministry of Health – Communicable Disease Control, Animal Health Provincial Office (AHPO) Department of Animal Health and Production (DAHP), Wildlife Protection Office (WPO) of Ministry of Health, Ministry of Agriculture, Forestry and Fisheries and the Ministry of Economy and Finance, National Committee for Disaster Management. National Veterinary Research Institute (NaVRI), Institut Pasteur du Cambodge, Port Authority and the Ministry of Transport (CAMSAB: Cambodian Shipping Agency and Broker), Ministry of Cults and Religions</p>
	Vaccine/drug manufacturing capacity	Little to non-existent

Source: Author's own compilation.