

NTS ALERT

Overview on

the State of Pandemic Preparedness in Southeast Asia: Challenges and the Way Forward

In the first part of our focus on health security, the NTS alert looks at the state of pandemic preparedness in Southeast Asia, while in the second part later in the month we will turn our attention towards the issues of poverty and infectious diseases. This edition draws upon the result of the conference on Pandemic Preparedness in Asia held by the Centre for NTS Studies at the S. Rajaratnam School of International Studies in January 2009.

Introduction

According to the World Health Organisation in 2008, pandemic preparedness in most, if not all, countries and regions remains incomplete. The need to act upon this statement is made more urgent by the fact that the precise timing, location and overall impact of a future pandemic remain speculative, at best, and by the increasing complacency and so-called ‘flu-fatigue’ around the world.

To address this pressing matter the Centre for Non-Traditional Security Studies (NTS Centre) at the S. Rajaratnam School of International Studies (RSIS) in Singapore, organised a conference on Pandemic Preparedness in Asia to examine various frameworks of pandemic preparedness in the region. The overriding aim was to map out the state of preparedness by critically examining the various strategies currently in use and to stimulate discussion with regards to innovative approaches.

A session on Local Frameworks was convened in order to identify current gaps in planning, to

determine indicators for evaluating the systems in place and to find ways of further improving the existing plans. Representatives from Indonesia, Thailand, Vietnam, Philippines and Singapore were invited to present their respective models of pandemic preparedness, for which we provide a brief summary and analysis below. Civil society actors from Cambodia, Indonesia and Malaysia also spoke on the level of preparedness in their respective countries.

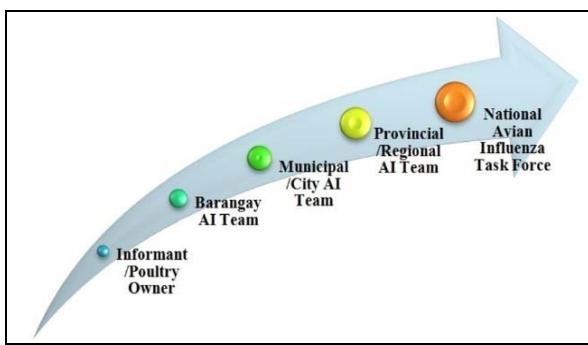
What has been done?

1. Multi-level preparedness

All countries recognised the importance of a potential influenza pandemic and the government of each country has shown political will and support towards planning for a pandemic. To a certain extent, each has followed the general guidelines set out by the WHO, proposing measures for early containment on the basis that an original outbreak within their country is a likely scenario. This is true even for the Philippines (see Figure 1) which has, thus far,



remained “bird-flu free”. Within the countries, specific targets, such as strengthening influenza surveillance systems, have been set and work is currently being conducted to ensure that these targets are met in a timely fashion. Figure 1 below shows a diagrammatic representation of the pandemic preparedness system in the Philippines.



As illustrated by the figure, the Philippine approach includes a system that is heavily reliant on community-based responses, via a reporting chain structure, of which the highest echelon is the National Avian Influenza Task Force while the lowest are local community members, for example poultry owners. Similarly, Thailand has developed a sustainable and integrated management system, termed an ‘incident command system’, at various levels of government, the aim of which is to empower provincial and local authorities and to include the civil society as the primary force for early warning and monitoring.

2. Partnerships at global, regional and local levels

Most ASEAN countries such as Indonesia, Thailand, Vietnam, Cambodia, Malaysia and the Philippines are conscious of the need to engage civil society actors who maintain a strong presence at the grassroots level to improve education and awareness among the population. The involvement of civil societies and inclusion of local inputs are seen as vital. For example, Indonesia has a strong campaign from the faith-based organisation, Muhammadiyah, in raising awareness with regards to improved hygiene practices, while in Thailand, non-governmental organisations (NGOs) and the Thai Red Cross

Society are working towards empowering and training the community. Public relations and educational materials have also been developed in Thailand. Mercy Malaysia has conducted simulation exercises in partnership with the Malaysian government, the World Food Program and the National Security Council. The exercises simulated logistics situations involving quarantines and airport, port and ground security and transport. These examples demonstrate government to government partnerships under the ASEAN framework at the regional level, and also government partnerships with the WHO at the global scale, showing both horizontal as well as top-down and bottom-up vertical approaches, respectively.

3. Improvement of surveillance and laboratory capacity

All countries are aware of the need to strengthen surveillance and reinforce laboratory capacity in the region. Indonesia, Thailand, and particularly Singapore have made significant steps towards combining short-term and long-term actions. Indonesia, for instance, has developed the Integrated Epidemiological Surveillance Managing Virus System to control outbreaks in animals through means of bio-security, vaccination, compensation for culling of birds and long-term capacity building of health services. Thailand has systematically linked the animal and human health surveillance system and included the community, hospital, laboratory, and medical networks within the framework.

4. Attempts at multi-sectoral planning

Some ASEAN member states have also made efforts to incorporate multi-sectoral pandemic preparedness planning. Indonesia has brought together a committee with members from 17 ministries, the National Planning Agency, the army and the police. Thailand has adopted a broader disaster management framework that clearly prioritised pandemic influenza together with the management of other types of disaster such as floods, landslides and dangerous chemicals, by developing a sustainable and integrated system. These efforts are notable

attempts at broadening the scope of pandemic preparedness as multi-sectoral planning requires the involvement of major stakeholders from health, agriculture, business and civil society sectors. It also requires substantial collaboration, communication and co-operation between the various actors in order to make it truly multi-sectoral, multi-disciplinary and holistic. In sharp contrast to this, Vietnam's strategy is focused more on preventive measures such as surveillance, improved hygiene, dissemination of information, vaccination, border quarantine and early containment, rather than on holistic preparedness. It boasts a two-pronged strategy with speed, transparency and high-level government commitment.

5. Simulation exercises and legal frameworks

In addition to adopting these vital strategies, Indonesia, Malaysia and Singapore have also held preparedness simulation exercises in order to test out their plans. Indonesia issued the Presidential Instruction 1/2007 to relevant national institutions, including the army, for coordination of national and local pandemic preparedness plans. It has established a number of guidelines and protocols that were followed by local and national-level pandemic preparedness simulations exercises. This is important since collective behaviour may not be very rational during a crisis, and simulation exercises may help to evaluate and improve current plans. Similarly, the Philippines has issued legal mandates and local ordinances to ensure that the national and local preparedness plans are executed. However, the laws may be open to legal challenge if there is inadequate compensation given for the culling of birds.

Indeed, achievements have been substantial and, overall in the region, there has been a dramatic shift in attitudes towards pandemic preparedness. However, when one takes a closer and more analytical look, it becomes clear that the extent to which this applies at national, sub-national or local levels varies. Many challenges remain on the road ahead.

Common Challenges

Variations in approaches to economic development and in the governing styles and structures of each country have resulted in several core distinctions among members of ASEAN. Furthermore, systemic challenges include a profound lack of economic, technical and human resources, of inequitable allocations of such resources as well as of relevant grass-roots level demographic and health data. In fact, perhaps it is for these reasons that several national plans did not provide adequate operational procedures for key stakeholders during each phase of the pandemic, resulting in a lack of clarity and coherence.

The Thai plan, for example, retained the format of a strategic framework rather than an operational guide and although the organisations responsible for achieving a specific goal were identified, precise operational tasks remained unclear and unaccountable, especially at the local level. Vietnam has recently experienced numerous shifts in pandemic preparedness approaches which may destabilise the system. Furthermore, the current framework appears to be reactionary rather than future-oriented, partly because pandemics are seen to be of socioeconomic and medical concern, but not a matter of national security.

1. Wide geographical area and decentralised authority

Indonesia is challenged both by its vast geographical disconnectedness and its decentralised geo-political organisation. There are a total of 440 districts with elected local governments, hence causing major challenges for administration, co-ordination and continuity of health care provision in crises. While the human population is approximately 220 million, it is unclear what the vast poultry population amounts to, particularly within the more at risk poultry sectors 3 and 4, or the small scale farms and backyard farms, respectively. Of the 33 provinces, 23 are endemic for avian influenza (AI) in poultry while 13 have had outbreaks within the human population. In the Philippines,





50 percent of poultry comes from backyard raisers and problems arise amidst fragmented financing and compensation. In Cambodia, for example, there are accessibility barriers in reaching remote villages and little incentive for residents to report disease outbreak because of travel costs and lack of compensation for culled animals.

2. Stockpiling and accessibility to vaccines

Since stockpiling of antivirals at a level currently feasible would only provide coverage for a very small proportion of the population, tough questions remain about logistics for provision of antiviral drugs and regarding which groups within the population should or would receive these drugs as a priority. There is an inadequate vaccine manufacturing capacity in the region and to address the shortage, there is some possibility of setting up local production even though it is estimated that developing an antigenically matching vaccine could take six months, or longer. Few countries have defined priority groups for vaccination, such as health practitioners, the army and so on in their national plans.

3. Lack of interconnectedness and cross-border collaboration

Integrating pandemic preparedness and response into general emergency preparedness is also important, and the focus of all but Singapore was on situations involving outbreaks of H5N1 that originated within their borders, without thoroughly discussing measures to address an imported epidemic. This should include the possibility of AI being carried across borders by illegal migration of birds and/or humans. Lastly, there is still a lack of interconnectedness and cross-border collaboration within the region even with the international frameworks currently in place.

4. Larger threat of Emerging Infectious Diseases (EIDs)

Faced with these challenges, it is sobering to hear the facts that more than 300 new diseases have

emerged in the past 70 years, a majority of which are the result of jumps from wild animal to human. Experts claim that outbreaks will increase as humans delve into ever-closer contact with wildlife and disease multipliers, such as environmental degradation and climate change, alter the life cycles of disease vectors. Meanwhile, older diseases are rapidly crisscrossing the planet as humans travel to more exotic and distant corners of the world.

5. Equitable sharing of virus samples and open information

Indonesia raised the important issue of more equitable sharing of virus samples and open information. The WHO system of sharing influenza virus samples, Global Influenza Surveillance Network, has limited effectiveness as it obtains resources from developing countries but leaves them vulnerable to an influenza pandemic, thus placing emphasis on risk assessment at the expense of pandemic response. Furthermore, limited global production capacity for influenza vaccine is a serious challenge for developing countries, as they are likely to face an acute shortage of H5N1 vaccines – a challenge compounded by advanced vaccine orders placed by developed countries. With a maximum production capacity of 500 million dosages for a global population of 6.7 billion, an immense gap exists between demand and supply.

To address these limitations, the WHO has adopted Resolution 60.28 which requires WHO to “identify and propose...frameworks and mechanisms that aim to ensure fair and equitable sharing of benefits...taking strongly into consideration the specific needs of developing countries”. At the Inter-Governmental Meeting (IGM) convened in December 2008 to implement the terms of the resolution, Member States committed to sharing influenza viruses and the benefits on an equal footing. The elements of the benefit sharing system are as follows:

- i. Provision of diagnostic tests and materials
- ii. Laboratory capacity building
- iii. Regulatory capacity building
- iv. WHO antiviral stockpile

- v. WHO pandemic influenza vaccines stockpile
- vi. Access to vaccines for developing countries
- vii. Technology transfer
- viii. Financial support

The Way Forward

National-level

Pandemic preparedness activities take place within the context of national priorities, competing activities and limited resources. Joint approaches that foster **closer multilateral cooperation and promote cross-sectoral participation** of the government, policy, academic and civil society communities will generate a more comprehensive, efficient and cost-effective strategy to prevent future crisis situations. Addressing additional common regional challenges, and finding optimised solutions, will help **tackle not only the symptoms but also the underlying causes** of pandemics. This should include increasing the focus on farming practices, environmental conservation, long-held lifestyle traditions, public misconceptions, media misrepresentations, poverty-line economics and novel compensation funds such as supplementary farm insurance. **Plans and procedures should also be reassessed** and updated as new technologies and increased information become available, and as the endemic status of infections alters.

Regional level

In summary, ASEAN countries, predisposed due to social, economic, demographic, environmental and behavioural determinants of an outbreak, and because of their close geographical location to each other, have great incentives to work together to improve individual and combined strategies for preparedness. There may be a need to **evaluate and streamline the regional framework** to harmonise current approaches, although keeping in mind variations in local settings. For instance, there may be a need for the Mekong Basin Disease Surveillance (MBDS) system to be

plugged into the ASEAN and the Global Outbreak Alert and Response Network (GOARN) surveillance frameworks since people move frequently across borders.

Although there seems to be no ‘one-size-fits-all’ solution, national responses should be plugged into existing regional frameworks, which in turn represent international guidelines and protocols. There is currently a rising window of opportunity within pandemic preparedness activities that should be seized, in order to **strengthen essential response capacities** required for a growing number of public health emergencies.

The region would benefit from working **towards a broader framework** that does not just focus on pandemic preparedness, but on an EID framework or a disaster management framework. By doing so, all nations involved would be **building up capacity for multi-sectoral preparedness** not limited to pandemics but extending to mitigate the threat of other EIDs, natural disasters and other emergencies. This would **optimise limited resources** and is very relevant for ASEAN and Asia on the whole, considering the frequency of earthquakes, floods, cyclones, landslides and other similar events.

While effectiveness remains the key, the role of **ethical and sustainable preparedness and response** should guide the preparedness plans and governments ought to strive to include equity, efficiency, solidarity and liberty in all policies. Although the economic cost of these commitments cannot be under-estimated, failure to do so may result in much greater social costs including the breakdown of **health security for rich and poor alike**.

Concluding, one should bear in mind that in any urgent or emergent public health situation, conflicting individual and population interests should be balanced. To assess and balance these competing interests and values, policy-makers can draw on sound ethical principles. Such an ethical approach does not provide a prescribed set of policies; instead it applies principles such as equity, utility, efficiency, liberty, reciprocity and solidarity, in light of local context and cultural values. Policymakers can use these principles as a





framework to assess and balance a range of interests and to ensure that overarching concerns, such as protecting human rights, are addressed. Any measures that limit individual rights and

civil liberties should be shown to be necessary, reasonable, proportional, equitable, non-discriminatory and in full compliance with national and international laws.

Note: There are no citations in this issue of the NTS-Alert as the conference followed the Chatham House Rules. Please note that citation of any parts of this Alert requires permission from the NTS Centre

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