

In mid-2005, WHO and APEC assessed the status of country's pandemic preparedness. Since then, WHO spearheaded the acceleration of pandemic planning process, invited multi-sector participation, and advocating international collaboration. Some countries have shown progress through animal surveillance, culling/compensation and community awareness, but there remains much work to be done.

Avian influenza virus has already entrenched and is expanding to neighboring regions. The reported number of human cases is still small considering the size of the spread in birds. Increased exposure of humans to H5N1 resulting from global spread multiplies the opportunity to adapt or mutate. Containment of a pandemic influenza is possible only if earliest signals are promptly detected by surveillance and vigorous measures are implemented rapidly.

Keywords: avian influenza virus, H5N1,

AGRICULTURAL BIOTECHNOLOGY TRENDS AND NICHEs FOR THE PHILIPPINES

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The main objective of this paper is to assess the leading edges of today's knowledge in agricultural biotechnology at the global scale, and offer some recommendations on the possible niches of the Philippines. Until recently, biotechnology is neatly classified as agricultural (including forestry and aquaculture), health, industrial and environmental. Presently, however, a great revolution is going on. Agricultural biotechnology is invading the other fields of biotechnology! We can call this the third agricultural revolution. The first revolution started the process we now call civilization 10000 years ago, the second (the Green Revolution) saved civilization from hunger about 40 years ago. The third hopes to save us from the problems created by the first and second revolutions and provide the material needs of future generations in a sustainable manner.

The scope of agriculture is now being extended from provision of basic needs, namely, food, fiber and clothing to include needs of modern civilization such as energy, materials, drugs, and industrial products such as enzymes. The definition of agricultural crops is being extended to include not only higher plants, but all photosynthesizing organisms. Techniques traditionally used for industrial scale culture of bacteria and fungi are being applied for single cell, tissue and