One Health contributing to poverty reduction

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Animal Health Service
FAO-HQ, Rome, Italy
• 192 member countries
  + 2 associate members
  + EU
• Ministers of Agriculture
• Staff 3600 total
• Budget 2012-2013
  2.4 billion USD
• 90 FAO country offices

Regional and subregional offices
FAO Mandate

• helping to build a world without hunger
• Raise levels of nutrition and standards of living
• Improve agricultural productivity
• Better the conditions of rural populations
• Contribute to the expansion of the world’s economy

Two families

Germany: The Melander family of Bargteheide
Food expenditure for one week: 375.39 Euros or $500.07

Chad: The Aboubakar family of Breidjing Camp
Food expenditure for one week: 685 CFA Francs or $1.23

http://www.humanespot.org/node/2885
Balancing different objectives for the livestock sector

- Income generation
- Food security and safety
- Environment and natural resources
- Human health

Emerging zoonotic pathogens 1976-

- 1976 Cryptosporidium parvum
- 1977 Ebola (Congo)
- 1977 Hataan virus (Korea)
- 1977 Camplyobacter jejuni
- 1982 E. coli O157:H7
- 1982 Borrelia burgdorfi (Lyme Disease)
- 1983 Human Immuno deficiency Virus (HIV)
- 1983 & 1997 Avian Influenza A H5N2 (USA & Italy)
- 1984 Escherichia coli O157:H7 (USA)
- 1985 Vancomycin-Resistant Enterococcus (USA/UK)
- 1987 Methicillin-Resistant Staphylococcus (USA)
- 1988 Hepatitis E
- 1989 Ehrlichia chaffeensis
- 1989 Venezuelan Hemorrhagic Fever (Venezuela)
- 1989 Barmah Forest Virus (Western Australia)
- 1991 Guanarito virus (Venezuela)
- 1992 Bartonella henselae (cat scratch disease)
- 1993 Sin nombre virus (USA)
- 1993 & 1995 Avian Influenza A H5N2 (Mexico)
- 1994 Hendra Virus (Australia)
- 1994 Sabin virus (Brasil)
- 1996 Bovine Spongiform Encephalopathy (UK)
- 1996 Laguna Negra Virus (Paraguay/Bolivia)
- 1996 Australian Bat Lyssavirus (Australia)
- 1996 Vancomycin-Resistant Staphylococcus (Japan)
- 1997 Menangle Virus (Australia)
- 1997 H5N1 flu (Hong Kong)
- 1998 Nipah Virus (Malaysia)
- 1999 Choclo Virus (Panama)
- 1999 & 2007 Avian Influenza A (Italy & Netherlands)
- 2002 Monkeypox (USA)
- 2002 & 2004 Avian Influenza A H7N3 (Chile & Canada)
- 2002 & 2007 Avian Influenza H7N2 (USA & UK)
- 2003 Severe Acute Respiratory Syndrome - SARS (China)
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• 2002 & 2007 Avian Influenza H7N2 (USA & UK)
• 2003 Severe Acute Respiratory Syndrome - SARS (China)
• 2003 Avian Influenza A H5N1 (China & Vietnam)
• 2004 – 2008 Methicillin-Resistant Staphylococcus aureus CC398
• 2007 & 2008 Avian Influenza A H5N2 (Nigeria)
• 2009 Pandemic Influenza virus A H1N1 (Mexico & USA)
• 2009-2011 Escherichia coli O104:H4 (STEC O104:H4) (Georgia & Germany)
• (2011-2012 Schmallenberg virus) not zoonotic

What has created a shift in addressing zoonoses?

• BSE (1980s)
• Nipah (2000)
• SARS (2003)
H5N1 animal cases in 2012 (status 26 April 2012)
FAO/OIE/WHO Collaborative Framework

The FAO-OIE-WHO Collaboration

Starting international and regional action to address health risks at the animal-human-ecosystems interface

A Tripartite Concept Note

April 2012

One Health

Human Health

Animal Health

Ecosystem Health

Social factors/impact

Economic factors/impact
Delivering One Health

What’s it going to take?

Understanding complexity
Dealing with the unknown
Responding to uncertainty

We can make it happen.
Let’s begin.

Understanding disease drivers for emergence spread and entrenchment
Neglect of public health systems and attention diverted from infectious diseases

Urgent need for stronger and more effective health systems

Progression of joint human and animal health activities

<table>
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<th>Before H5N1</th>
<th>Zoonoses</th>
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<td>Communication</td>
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<td>Integration</td>
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Bangladesh One Health Society
Integrated simulation exercises

Bosnia & Herzegovina
Using a large map to illustrate and Enhance discussions

Zambia
Introducing the scenario through a theatre sketch
Communities are key for disease reporting, prevention and control

Target beneficiaries
How are (zoonotic) diseases prioritized?

- based on science?
- political decisions?
- social reasons??
- fear driven?
- combination of all?

Rabies a One Health Model disease

- Good tools available for prevention and control
- Important zoonotic diseases however still much neglected…. falls between the cracks…..why?
- Need for advocacy (World Rabies Day)
- Need for a multidisciplinary and multi-sectoral approach (One Health)
When old systems do not solve new problems anymore…

…there is a need for a paradigm shift

Bellagio 2011

Photo: A.Gomez de Silva
One Health

...enhancing communication and leadership skills, development of cultural sensitivity, and an ability to be engaged in multifaceted and multidisciplinary teamwork becomes essential.

...Needs and opportunities for One Health professionals are expanding rapidly in public and private agencies dealing with animal and human health, agencies and corporations charged with public health, safeguarding the environment, food safety, consumer protection and food security...

.. There is an increasing societal need for public health professionals with the competencies, knowledge, and skills to address the multidimensional problems of zoonotic and food-borne diseases...