Linking animal diseases and social instability

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Summary
Social instability occurs as a consequence of war, civil strife or natural disasters such as earthquakes, floods and droughts. Animal diseases, including zoonoses, can be both a precursor to social instability and a result of social instability. Coping mechanisms, such as sound policies, trust in government, and robust infrastructure break down at times of civil instability. Such breakdowns often lead to a decline in both public health and the food and agricultural livestock base, thus creating a vicious cycle that involves inadequate nutrition, threatened livelihoods, and fewer opportunities for safe trade. This article is principally a discussion of a theoretical nature on the dynamics between animal diseases and social instability. Based on their experience of working for the Food and Agriculture Organization of the United Nations (FAO), the authors provide numerous examples of the connection between the two, mostly in countries that have fragile environments and are experiencing protracted crises. Disease has a direct and immediate effect on a community, but, in addition, if the community is not able to recover from the impact of a disease on their health and livelihoods, the consequences of an outbreak can persist even after the disease is no longer present. Stability, therefore, depends on a variety of factors, including the ability of a community to overcome the effects of a disease outbreak or other destabilising event.

The FAO approach to helping families and communities to cope with the destabilising effects of animal diseases is to build resilience, particularly amongst the most vulnerable households. This requires individuals and governments to gain a better understanding of what drives disease at the interface between human and animal health. In addition, it requires governments to invest in social protection programmes, establish a long-term risk reduction strategy that decreases vulnerability, and improve the sustainability of safe agricultural and marketing practices.

Keywords

Introduction
The health and productivity of the livestock sector is vital to the world’s nutrition and social fabric, and for many countries it is of profound cultural value and even linked to national identity. Livestock production systems occupy some 30% of the planet’s ice-free land surface (1) and employ some 1.3 billion people globally (2). This workforce depends directly on livestock for their livelihoods, but there are many others who are indirectly dependent on the health of animals (i.e. those working in food manufacturing, production, marketing and trade). Livestock and their products provide high-value nutrients, fibre, wool and leather. In smallholder systems, they provide a means of tilling the soil and harvesting crops and, in many countries, they also serve as transport. A thriving livestock sector is imperative to sustain poor families, as many of these families depend on livestock to provide up to one half of their household income and between 6% and 36% of their

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protein intake. Of the billion poor people who survive on less than US$ 2 per day and depend on livestock (66% of whom are in rural areas and 33% in cities), the vast majority live in just four countries – India, Nigeria, Ethiopia and Bangladesh – which are hotspots for poverty and zoonoses (3).

Systems of animal agriculture development provide stability to communities and families in these countries, whereas disease outbreaks impinge on economic growth and livelihoods. The transmission dynamics of zoonotic infections are a direct reflection of the relationship between human health and animal health. These infections affect well-being, nutrition, welfare and economic solvency. Likewise, high-impact non-zoonotic diseases of a transboundary or endemic nature have a negative effect on public health through the loss of quality and nutritious foodstuffs, economic welfare or commercial opportunities.

The world is experiencing an increased risk of disease threats that are emerging or re-emerging at the interface between humans, animals and the environment. These threats can spread quickly and, if not mitigated, can evolve into major crises, seriously affecting animal and human health, food security and social stability.

Livestock health, human security and social stability are interdependent. Too often, Veterinary Services and animal health programmes are disrupted as a result of armed combat, civil disorder and failed governance, and this can lead to the emergence or outbreaks of disease. It is also possible for infectious diseases to be the cause of social unrest and instability, as they can disrupt infrastructure, reduce food availability and generate fear and panic (4).

This paper does not aim to analyse the evidence of this relationship between animal diseases and social stability, but rather to cover discussion of a theoretical nature. Based on their experience of working for the Food and Agriculture Organization of the United Nations (FAO), the authors provide numerous examples of the connection between the two, particularly from countries in fragile environments and those experiencing protracted crises. Disease has a direct and immediate effect on a community, but, in addition, if the community is not able to recover from the impact of a disease on their health and livelihoods, the consequences of an outbreak can persist even after the disease is no longer present. Stability, therefore, depends on a variety of factors, including the ability of a community to overcome the effects of a disease outbreak or another destabilising event.

The circular dynamic: social instability and disease

Four broad areas that promote a vibrant and resilient social fabric that contributes to health are: political stability and

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<td>Preservation of ecosystems/services – climate change and mitigation</td>
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reliable legal systems, social and cultural equity, economic prosperity, and environmental management (Table I). Figure 1 captures these broad areas and depicts the relationship between stabilising elements and the maintenance of health. When too many of the elements become uncertain, fail, or are attacked by outside forces (violence or natural disaster), the effects can lead to instability and the loss of essential services, or access to them. In these circumstances, diseases – zoonotic or non-zoonotic – can thrive. The reverse is also true: when there is a disease outbreak that overwhelms more than one of these broad areas, other elements that would not otherwise be affected begin to fail, leading to social instability, panic or violence.

Wealthier countries tend to be more stable in terms of governance, the rule of law, food availability, superior nutrition and quality education, and are therefore more resilient when a disease incursion does occur. More fragile countries with lower resilience – whether because of gross inequalities, a poor economy, geopolitical unrest or corruption – suffer greater impacts from adverse events. In addition, citizens in these countries have a wide range of reasons to distrust those in charge of protecting or defending them.

Poverty, though not the main discussion point of this paper, can also create social instability if the numbers of alienated, unemployed or disenfranchised people increase beyond a critical threshold. Poverty and infectious (and other) diseases are interrelated and limit access to goods and services in the aftermath of a disaster (natural or anthropogenic).

When Health/Veterinary Services fail, the occurrence of endemic disease and the risk of disease entry from abroad (cross-border incursions from neighbouring countries or transboundary introductions from other continents) are likely to increase. As endemic disease outbreaks further erode livestock production efficiency and profitability, unemployment may surge. The inability of family members to find or maintain gainful employment, obtain food, and access goods and services is the start of a downward spiral for many families; this can have a knock-on effect on the community and eventually has an impact at the national level. Deteriorating employment levels affect health protection, nutrition and shelter, with individuals finding themselves further disenfranchised. This then leads to further marginalisation, which decreases their capacity to care for themselves and their families. In such cases, people often leave their communities in search of opportunities elsewhere, leading to imbalances in the communities of origin and in the new centres to which they have migrated, be they refugee camps, cities or other villages.

**Epidemics increase the risk of social instability**

Animal diseases, particularly high-impact diseases, can cause public panic. Consumers may fear that the government cannot protect their food or control the outbreak; farmers and communities may fear for their livelihoods and economic stability; the private sector may fear the negative economic consequences of animal culling, animal product destruction, and lost markets and trade; and other sectors fear the chain reaction of the resulting serious consequences (5). Beyond causing illness to animals and possibly humans (zoonoses), epizootics can potentially result in colossal damage to families, communities and the affected private sector, and international trade dynamics. Additional consequences of large-scale, protracted outbreaks can include food insecurity, economic collapse, loss of confidence in the government, and social and political unrest.

Safeguarded animal populations – which are protected either through sustained investments in prophylactic interventions as part of herd or flock health programmes (i.e. vaccination, dipping) or through a sound system of biosecurity that keeps health threats at bay – are generally rare in most

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**Fig. 1**

The circular dynamic of social instability and disease

- War/civil unrest
- Economic collapse
- Earthquakes
- Drought
- Floods
- Climate change
- Changing migratory patterns
- Environmental encroachment and spillover events (infection/disease)
- Invasive species
countries. Outbreaks of high-impact diseases (also known as high-consequence diseases) of a transboundary nature, such as foot and mouth disease (FMD) or virulent avian influenza, can devastate a producer, a series of producers, the community dependent on that sector or commodity, and the allied commercial sector. If there is no safety net to enable recovery, this leads to loss of livelihoods and economic ruin.

Family farming in many respects is more than just a business – it is a way of life and one that is deeply associated with values such as self-worth, commitment and community. Hard data on the impact of transboundary animal diseases on these important issues are not usually captured when compiling information about an outbreak; however, the news and grey literature can provide an insight into the effect of outbreaks on psychological well-being and social stability. For example, in Chinese Taipei and the Republic of Korea, the news reported the number of dairy producers who took their own lives during the 1999–2001 FMD outbreaks. Similarly, news reports provided information on the breakdown of the rule of law during the FMD control campaigns in Mexico in 1953–1954 and Colombia in 1998, during which several veterinary professionals lost their lives.

Official data are available, however, on the psychological consequences of the FMD outbreak in the United Kingdom in 2001 and the tragic events became global headline news. The outbreak, which began when pigs were fed with restaurant waste that contained contaminated meat which had been illegally imported, cost the farming and tourism industries £3.7 billion. These economic losses led to strong political pressure for a change in agricultural policies (6). The destabilising nature of this incursion had profound effects, not just for the economy, but for people's overall well-being, with many individuals committing suicide (7, 8). Thomas et al. (9) found that the percentage of farmers reporting psychological difficulties before the outbreak was 6%, which is less than the figure for the general population. However, during and after the outbreak, high rates of psychological morbidity upwards of 73% were found in hard-hit areas (e.g. Cumbria), with farmers the most affected. It is important to note that the level of psychological morbidity amongst farmers correlated directly with the degree of culling and counter-epizootic measures imposed – the more culling that took place and the more measures imposed, the greater the level of morbidity.

The unprecedented geographical spread in 2004–2006 of the zoonotic H5N1 strain of highly pathogenic avian influenza virus is another important example of the ability of a disease to affect family livelihoods and national economies. By the end of 2006, the epidemic had caused direct economic losses estimated at over US$ 10 billion. These losses, which were due to the disease itself and to the control measures, such as the culling of birds and closure of markets, had a devastating impact on farmers, traders, feed mills, breeding farms and exporters. As well as causing severe losses in the poultry sector, the disease also created fear among consumers, and gave rise to social tension in the countries that were hardest hit. In Egypt, for example, there were instances of overt public outrage.

The world witnessed another example of a high-impact disease of animal origin with the unprecedented 2014–2016 outbreak of Ebola virus disease (EVD) in West Africa. The outbreak, which principally affected Guinea, Liberia, and Sierra Leone, caused immense social disruption, international concern and fear, stigmatisation of individuals, and economic strife for thousands of people. The findings of a rapid assessment carried out in 2014 by FAO together with the World Food Programme and the governments of the region indicated that the Ebola outbreak resulted in a serious shock to the agriculture and food sectors. The epidemic had a severe impact on rural livelihoods and food security, with the lack of access to food, rather than its availability, causing the greatest food insecurity. Trade activities declined significantly within the livestock sector, with the hunting and selling of bushmeat most affected. Many of the worst-affected areas in Forested Guinea were relatively food secure prior to the Ebola incursion, but the outbreak resulted in high food insecurity, with households consuming less-expensive and less-preferred food, limiting portion size, reducing the number of meals per day, and relying on food from others. Disease-containment efforts, especially the closure of borders, the banning of livestock markets and the confinement of people, curbed or entirely crushed trade activities. These factors led to a decline in the purchasing power of livestock and crop producers, as a drop in the sales of eggs, meat and manure had a negative impact on their income (10).

In the case of Liberia, the epidemic severely depressed agriculture production and the forestry sector, which accounted for approximately one quarter of gross domestic product (GDP) and half of the country's workforce. In the autumn of 2014, nearly 14% of the population were estimated to be severely food insecure, as the disruption of agricultural activity reduced the supply of agricultural commodities and substantially increased their prices (11). Sierra Leone fared better, with the government managing to avoid civil unrest by facilitating the transport of food and other essential goods despite movement restrictions, market closures, bushmeat condemnation, and the economic recession during the outbreak (12).

Other important effects of the EVD outbreak included the closure of large livestock markets; the stigmatisation of products from the affected areas, which were the major supply areas; and the massive departure of the biggest consumers of livestock products following the slowdown.
or interruption of activities at the bauxite mines. These factors led to: i) lowered purchasing power amongst the stakeholders in the livestock sector; ii) a drop in the sales of eggs, meat and manure; iii) a decline in poultry turnover following bans; iv) reduced transport for food and other commodities; v) increases in the cost of medicines to treat animal diseases; vi) the disruption of animal vaccination campaigns; and vii) interruption in the food supply chain and in the supply of inputs from non-affected neighbouring countries (vaccines, maize, smoked fish, shellfish, etc.) (10).

The EVD outbreak started as a health disaster, quickly became a food security and humanitarian crisis, and led to social instability, including the unjustified stigmatisation of surviving individuals or affected villages. Crucial response and rehabilitation activities undertaken by FAO comprised community campaigns to help to stop the spread of the disease (risk communications and outreach), cash/voucher and loan schemes, and the provision of in-kind or financial support to vulnerable households and communities (13).

High-impact animal diseases, besides directly affecting the producer and allied industries, can also affect consumers – by increasing the price of staple goods and/or shaking consumer confidence. However, although market prices may increase because of the low availability of a commodity, the opposite can occur if a commodity is considered tainted, as market retailers lower their prices to attract wary customers.

Social instability, conflict and disease

Migration and displacement are significant characteristics of armed conflicts. Forced migration is currently one of the most pressing challenges facing the international community. Figure 2 gives an indication of the numbers of displaced people who have moved in response to instability in their own communities (14). The movement of people, animals and products in these emergency conditions contributes to an increased risk of infectious diseases. Often, people take their valuable belongings, including animals or animal products (foods) with them, and these animals/products may introduce new pathogens into the areas which they enter or they may be exposed to disease agents to which they have no immunity, thus exposing susceptible humans and potentially causing outbreaks. In Turkey, for example, rinderpest was introduced into the susceptible livestock population as a result of the mass migration of refugees and animals following the Gulf War in northern Iraq. Turkish farmers, rushing to dispose of their sick animals as quickly as possible, further spread the disease through the marketing chain (4, 15).

In protracted and post-conflict situations, people and their animals may suffer from epidemic diseases and zoonotic diseases due to the breakdown of health and veterinary systems, the dysfunction of disease control and surveillance programmes, or the destruction of infrastructure (4, 16). As a result of the stress of travel and unhealthy conditions, animals often become vectors for pathogens, bringing disease to refugee camps and bordering animal populations. This has been the situation recently in the Middle East, as Syrian refugees fleeing civil conflict have been accompanied by thousands of unvaccinated animals, creating a high risk of disease spread among livestock in neighbouring countries. Similar situations have been reported in South Sudan and the Democratic Republic of the Congo, where there has been a recrudescence of epidemic diseases during civil conflicts and subsequent migration. The infectious diseases most frequently associated with cross-border movement of people and their animals in these situations include several tropical zoonotic diseases (17, 18) and high-impact animal diseases such as East Coast fever, trypanosomosis, African swine fever and contagious bovine pleuropneumonia. These diseases devastate livestock production and threaten the food security and livelihoods of pastoral communities. Travel, unregulated trade, civil strife, natural migration, and mass migration caused by conflict and natural disasters have all repeatedly been shown to be an avenue for the spread of infectious diseases. Most conflicts affect rural areas and have a heavy impact on the livelihoods of the rural population, poor farmers and pastoralists. Ongoing conflict damages agricultural production, crops, livestock and harvests, and destroys rural assets, disrupting the value chain systems.

Intercontinental travel and trade can introduce pathogens into new environments, where the infectious pathogens find their ecological niche and may find a more vulnerable population. Wars, famines or recurrent conflicts can be a cause of the migration of people and communities in search of a safe haven. Unfortunately, the country that the migrants move to may have the same deficiencies in healthcare services as the country that they left. Under such conditions, diseases – zoonotic, waterborne or foodborne – can be rampant, especially in peri-urban environments, further eroding the health and resilience of individuals or whole populations (19, 20, 21).

In Syria, deficiencies in the Veterinary Services following the 2014 uprising meant that they were no longer able to carry out brucellosis vaccination in herds and flocks, which is probably what caused the reported increase in the number of cases in humans, although few data could be obtained. In this same country, it could be conjectured that industry standards of pasteurisation would be deficient. Prior to the recent civil war, Syria was considered to be at Stage 3 along the FAO/World Organisation for Animal Health 'Progressive Control Pathway' for FMD (22), meaning that it had a control strategy in place to eliminate disease circulation.
A country is listed if it features among the top-five per population group.

*People in a refugee-like situation are those who are outside their country or territory of origin and are facing similar risks to refugees, but whose status as refugees has not yet been ascertained.

IDP: internally displaced person
UNHCR: Office of the United Nations High Commissioner for Refugees

**Fig. 2**
Populations of concern to the Office of the United Nations High Commissioner for Refugees at the end of 2015

*Source: Modified from the Office of the United Nations High Commissioner for Refugees (14)*
cope or recover. However, the same natural disasters in families, communities, industries and public services can in the government structures. Under such conditions, funds available, and a high degree of public confidence contingency and response plans in place, sufficient this is often short-lived as there are emergency health.

political and social instability can be catastrophic for animal Natural disasters such as floods and droughts often unleash social instability and disease. These examples, and many others, have shown that political and social instability can be catastrophic for animal health.

The cycle of natural disasters, social instability and disease

Natural disasters such as floods and droughts often unleash social instability. In developing countries, this is often short-lived as there are emergency contingency and response plans in place, sufficient funds available, and a high degree of public confidence in the government structures. Under such conditions, families, communities, industries and public services can cope or recover. However, the same natural disasters in communities or countries without the comparable resources or resilience can have an immediate effect on public health (especially if waterborne pathogens contaminate the water supply). The damage to livestock infrastructure, both urban and rural, can be extensive. Livestock that survive natural disasters are invariably weakened and highly stressed, likely exposed to the elements and potentially at greater risk of starvation, disease and death in the months that follow. The proper disposal of carcasses (burial, incineration or rendering) is all but impossible in such crises, with a severe negative impact on the environment. Longer-term devastating effects may lead to resentment, and anger may be directed against social services, government structures and the international community, which exacerbates a series of health risks, including those related to the animal–human interface.

In the event of sudden natural disasters (e.g. earthquakes) where the health services are overwhelmed or partially destroyed, the same scenario can occur. Economic collapse may not occur overnight, but just as climate change is a gradual process, economic change can happen little by little until a limit is exceeded and a catastrophe ensues.

In Nigeria, terrorist groups and other non-state actors have affected the country’s ability to control disease, as they have destabilised the rule of law in certain regions, making it unsafe to carry out services in the field and severely hampering the ability of public services to function. This lack of fully operational government services contributed to the reintroduction of H5N1 into poultry areas in December 2014. The inability to control the disease was most probably the cause of outbreaks in neighbouring countries (2015–2016) and threatens over 300 million people living in West Africa and beyond.

These examples, and many others, have shown that political and social instability can be catastrophic for animal health.
Mitigating consequences

This article has looked at the drivers of animal diseases, considered the impact of disease on social stability and shown how social instability affects public and animal health. Little attention has been placed on solutions, other than to emphasise the importance of developing well-resourced national and international veterinary (and public health) systems that can implement structured disease control campaigns at the national and regional levels. Here, the discussion turns to ways in which disease outbreaks can be prevented and how their consequences can be mitigated.

As a developmental agency, FAO promotes food security, poverty alleviation, and eradication of hunger as a means of fostering better health and well-being. The 2016 World Humanitarian Summit took a detailed look at preparedness and emergency management and called for a fundamental shift away from crisis management to crisis prevention, with a focus on addressing the root causes of disease emergence, spillover, spread and persistence and promoting early action. As disease prevention is the most effective investment in health (a fact that is yet to be fully recognised by the global community), animal health organisations were asked to follow this crisis-prevention model and to cooperate in a more integrated and coherent manner, united in the priorities of preventing animal disease, reducing risk of exposure, and building resilience. To achieve these objectives, early warning systems and information systems can be strengthened and used to inform the design of shock-responsive social protection systems; coordination and investments can be improved to reduce risk and manage crises in vulnerable areas; and capacities to sustain animal health and food security can be enhanced as a contribution to overall resilience. Action to promote food security can help to prevent a disease crisis, mitigate its impacts and promote post-crisis recovery.

In addition to fostering better health, food security can serve as a conflict prevention and mitigation tool, thus helping to maintain peace. Food security can build resilience to conflict in a unique way and contribute to preventing conflicts and supporting economic development more broadly. At a meeting of the United Nations Peacebuilding Commission in 2015, the FAO Director-General stated that food security is an important foundation for peace, political stability and sustainable development (26). A clear challenge is, therefore, to strengthen food and nutrition security in countries facing protracted crises. To do that more effectively, knowledge and understanding of the possible interplay between food security and human security should be applied to help to shape more effective interventions and contribute to long-term results.

Early action to prevent outbreaks from spreading widely requires contingency and preparedness plans, robust systems for passive surveillance, and access to quality vaccines and drugs. Some control measures can have severe consequences for farmers and consumers, so the implementation of these measures requires trust between producers and public services (e.g. farmers must be able to have confidence that they will be compensated for slaughtered animals). Such private–public interaction requires an understanding of partnerships at the central and community levels. It was a common understanding of the importance of joint the action that enabled communities in conflict in parts of the Horn of Africa to implement control programmes during the rinderpest eradication campaign.

Establishing safety nets as a long-term objective will help to prevent and manage the impacts of disease and social unrest. A major challenge is strengthening the capacities of governments to design and manage effective contingency measures for the most vulnerable segments of the population.

Building resilience in the face of social unrest is challenging. Reducing vulnerabilities and risks and enhancing preparedness and response can best be achieved when resilience programmes address multiple health risks and hazards concurrently. Resilience can be strengthened by enhancing the capacity of the rural poor to manage risks and reduce their level of exposure and vulnerability (13).

The FAO approach to lowering exposure to risks of zoonotic diseases, or those of high impact that can destabilise small-scale communities or society, is to build resilience, especially in the most vulnerable households, families and communities. This requires individuals and governments to gain a better understanding of disease drivers and to work at the interface between human health and animal health. They must establish long-term risk reduction strategies that decrease vulnerability, invest in social protection programmes, and ensure the sustainability of safe agricultural and marketing practices.

In South Sudan, as part of FAO’s wider goals to end hunger, malnutrition and poverty in rural areas, the organisation has made improving the resilience of livelihoods a strategic objective. One of the activities under this strategic objective is providing support in developing the capacities of livestock service delivery systems at all levels throughout the country. FAO has worked closely with the relevant Ministries and local institutions to ensure a reliable and stable supply of veterinary drugs, vaccines and cold-chain system equipment to safeguard livestock production, thus maintaining food security, adequate nutrition, and some level of stability. In addition, local community-based animal health workers, under the supervision of well-trained veterinary staff, have also been given refresher training on necessary veterinary interventions and regulatory awareness and responsibilities.
Sustaining vaccination campaigns to control transboundary animal diseases is another example of how animal health interventions can promote stability. In Somalia, for instance, between 2012 and 2016, the efforts of government partners, communities, farmers and pastoralists, and the international development agencies directly benefited the livelihoods of millions of livestock farmers, pastoral communities, and vulnerable households and helped to maintain social stability.

During the unprecedented Ebola outbreak in West Africa, FAO played a subtle but important coordinating role at the subregional level, particularly through the formulation of a regional Ebola response programme, food security monitoring, grass-roots communication and messaging, resource mobilisation and the provision of technical support with regional humanitarian partners. Interagency coordination was key to responding to the epidemic. In the area of food availability and security, which is so important in ensuring social stability, FAO and the World Food Programme coordinated their efforts to respond to the negative impact of the disease on the agricultural sector. In this instance, FAOs work with other United Nations’ agencies and government institutions proved to be invaluable in addressing myths and providing messages on health. Through their in-country networks of animal health workers and extension services, which have existed for decades, they worked in the areas of social mobilisation, training and awareness-raising.

Continued research can help to direct efforts and resources to where they are needed most. The greatest benefit will be achieved when disease and poverty are addressed concurrently. The emerging livestock systems may afford unique pathways for smallholders to access inputs to reach emerging markets, thereby improving both animal health and social stability. Livestock production is rising sharply in response to the growth in population, income and urbanisation and the demand for improved nutrition. Herrero et al. (27) project that over the next 40 years the growth in consumption will be greatest in South/South-East Asia and sub-Saharan Africa. The sector that can best supply the new market demands will be the poultry sector. Bovine and small ruminant production will also be important, followed by swine production. Sustainable agricultural food systems that minimise the risk of emerging diseases will be needed to meet the food requirements of the rising global population while protecting animal and human health.

Conclusion

Everyone has a daily desire and need for food. If food is inaccessible or unaffordable the social fabric unwinds and becomes unstable. The 2016 World Humanitarian Summit concluded that peace and food security are inextricably linked – there is no peace without food security and no food security without peace. Investing in agricultural livelihoods, including those reliant on livestock, is a key step towards ensuring peace and stability.

Animal diseases can directly affect food security and the quality of nutrition for every consumer. An important challenge, should any crisis arise, is to ensure that mechanisms to stabilise a society are backed by strong government and institutions with solid administrative capacities and the ability to design and manage effective safety nets for the most vulnerable segments of the population. The unprecedented EVD outbreak in West Africa specifically showed the far-reaching impact, beyond the human casualty rate, that a disease can have on a society and the massive investment in recovery, rehabilitation and reconstruction that is needed if there is to be lasting stability and the promise of prosperity. For this to be a vision worldwide, leaders and decision-makers must shift their priorities and focus on ensuring health for all, including the health of our food-producing systems and the environment.

To avoid major epizootic outbreaks in the future, professionally guided community-based programmes on animal health will need to be an increasingly large component of humanitarian programmes in conflict-affected areas. Food and agriculture production supports social stability and peace. FAO believes that transformational change is required in the way that humanitarian crises are approached (28).

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Les liens entre maladies animales et instabilité sociale

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Résumé
L'instabilité sociale est généralement une conséquence des conflits armés, des guerres civiles ou des catastrophes naturelles telles que tremblements de terre, inondations ou sécheresse. Les maladies animales, zoonoses incluses, sont des signes précurseurs de l'instabilité sociale, mais aussi son résultat. En période d'instabilité sociale, les mécanismes d'adaptation aux crises liés notamment à des politiques judicieuses, à la confiance dans l'action du gouvernement et à des infrastructures solides s'effondrent. Ces défaillances entraînent souvent un déclin à la fois de la santé publique et des ressources essentielles de l’agriculture et de l’élevage, créant ainsi un cercle vicieux caractérisé par une nutrition inadéquate, des moyens d’existence menacés et des possibilités raréfiées d’accéder à des marchés sûrs.

L’essentiel de cet article est consacré à l’analyse théorique de la dynamique des liens entre les maladies animales et l’instabilité sociale. À partir de l’expérience acquise en travaillant pour l’Organisation des Nations Unies pour l’alimentation et l’agriculture (FAO), les auteurs donnent de nombreux exemples de ces liens, qui concernent pour la plupart des pays dont l’environnement est fragilisé ou qui sont exposés à des crises prolongées. Toute maladie a un effet direct et immédiat sur la communauté atteinte ; or, dans les situations où une communauté n’est pas en capacité de se relever après avoir subi cet impact ni d’assurer un retour à la situation antérieure en matière de santé et de moyens de subsistance, les conséquences d’un foyer persistent bien au-delà de la durée de la maladie. Par conséquent, la stabilité dépend de facteurs variés, dont l’aptitude d’une communauté à surmonter les effets d’un foyer ou d’autres événements déstabilisants.

La méthode suivie par la FAO pour aider les familles et les communautés à faire face aux effets déstabilisants des maladies animales consiste à renforcer leur capacité de résilience, en particulier dans les foyers les plus vulnérables. Cela suppose que les individus et les gouvernements améliorent leur connaissance des facteurs propices à l’apparition des maladies à l’interface entre la santé humaine et animale. En outre, cela suppose que les gouvernements investissent dans des programmes de protection sociale, qu’ils mettent en place une stratégie de réduction des risques sur le long terme qui limite les vulnérabilités et qu’ils œuvrent pour une meilleure durabilité des pratiques agricoles et commerciales exemptes de risques.

Mots-clés
Relación de las enfermedades animales con la inestabilidad social

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Resumen
La inestabilidad social es producto de guerras, disturbios civiles o catástrofes naturales como terremotos, inundaciones o sequías. Las enfermedades animales, comprendidas las zoonosis, pueden ser un precursor o un resultado de la inestabilidad social. En condiciones de inestabilidad civil se agrietan los mecanismos de un país para hacer frente a esas enfermedades (tales como políticas sólidas, confianza en los poderes públicos e infraestructuras robustas), lo que suele traducirse en un deterioro de la salud pública y de la cabaña ganadera en que reposan la alimentación y la agricultura, generándose así un círculo vicioso que trae consigo una nutrición deficiente, pone en peligro los medios de sustento y dificulta un comercio seguro.

Los autores examinan básicamente los aspectos teóricos de la dinámica que conecta entre sí las enfermedades animales y la inestabilidad social. Recurrir a su experiencia de trabajo para la Organización de las Naciones Unidas para la Alimentación y la Agricultura (FAO), ofrecen numerosos ejemplos de la relación existente entre ambos fenómenos, sobre todo en países que presentan un medio ambiente fragilizado y sufren crisis prolongadas. La enfermedad repercute directa e inmediatamente en la población, pero además, si esta no puede recuperarse de los efectos de una enfermedad sobre su estado sanitario y sus medios de vida, las consecuencias de un brote pueden dejarse sentir hasta mucho después de que la enfermedad haya desaparecido. La estabilidad depende por lo tanto de diversos factores, en particular la capacidad de las comunidades para superar los efectos de un brote infeccioso u otros episodios que las hayan desestabilizado. Desde la FAO se trata de ayudar a las familias y comunidades a lidiar con los efectos desestabilizadores de las enfermedades animales generando resiliencia, especialmente en las familias más vulnerables. Para ello es menester que tanto individuos como poderes públicos conozcan mejor los factores que hacen que una enfermedad se manifieste en la interfaz de la salud humana con la sanidad animal. Es preciso, además, que las administraciones inviertan en programas de protección social, instituyan una estrategia a largo plazo de reducción del riesgo, que redunde en una menor vulnerabilidad, e instauren procedimientos agrícolas y de comercialización más sostenibles.

Palabras clave
References


