

# Executive Note

A monthly briefing for business and government leaders from the World Economic Forum's Network of Global Agenda Councils

November 2014

Theme: Ebola Special



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## LIBERIA



President of Liberia, President Johnson Sirleaf giving a special address at the World Economic Forum Annual Meeting 2014 in Davos, January 22, 2014

## An interview with President Ellen Johnson-Sirleaf

### What is the current situation with Ebola in Liberia?

From all indications, the Ebola virus disease outbreak is being subdued. We know that because we are not getting as many cases as we did in July, August and September. Instead, we are getting isolated numbers of cases scattered around the country. In simple terms, the trend is flattening. But that said, this is a dangerous phase of the disease, when people could begin to relax preventive measures that resulted in the current decline in cases. Let me add that our ambition is to get to zero new cases by Christmas. The existing trend suggests that this ambitious goal will be achieved, using our Rapid Isolation Treatment for Ebola (RITE) strategy, which involves empowering our country health teams with trained personnel who have adequate assets to investigate cases and stop the transmission. Safe isolation of cases and treatment is our strategy.

### What are your most pressing needs as you respond to the situation?

Relative to strategy, our most pressing need is to redirect and focus our scarce resources at the country and local levels with the goal of doing purposeful and tactical hunting of cases. Every case that we find, we must list the contact and follow that for 21 days. This means that social mobilization has to be a key feature of our fight against the disease.

### What mechanisms need to be put in place to ensure a prompt and effective response to international crises in the future?

We need to ensure first that our public health system is fully equipped with the needed surveillance capacity at the local or sub-national level to detect and respond to any outbreak. This means that at a district and community level, we must develop a system for real case hunting. This should involve a process whereby surveillance officers are equipped with training, motorbikes, fuel, scratch cards and other facilities to detect and report cases when an outbreak occurs. We need to decentralize our public healthcare system. In addition, our international and regional partners like the World Health Organization, the Centers for Disease Control and Prevention, and the West Africa Health Organisation need to be swift in responding to outbreaks and not adopt a wait-and-see approach, especially when such diseases have the potential of being transported outside our borders. Lastly, we must develop regional disease surveillance systems to prevent the threat of exporting the disease from one nation to another.

### Are there lessons to be drawn from the Ebola outbreak that could be applicable to non-medical pan-regional and global crises?

The lesson to be learned from this crisis is that in pre-Ebola era, we took a more curative approach to healthcare

delivery and not a preventive one. Our healthcare delivery system did not address disparities in health. There were alarming differences in incidence, prevalence, mortality, burden of diseases, and other adverse health conditions that existed among specific populations (poor slum communities and rural residents). Therefore, when Ebola hit, these low-income and poor slum communities and rural inhabitants were the hardest hit (affected at higher rates and more severely). In simple terms, we failed to address inequitable health outcomes. We must therefore leverage our resources to capture needs at the community level and not throw our resources at large organizations, which sometimes do not funnel their resources to reach the poor and destitute segments of our population.

### Clearly, the immediate concern is to halt the spread of human tragedy, but Ebola will also leave an economic legacy in the region. What is your assessment of the tools and international assistance that will be needed for a sustainable economic recovery?

We acknowledge that as a consequence of the prolonged Ebola outbreak, revenue and growth have declined precipitously. We were moving to double digits, but we have reached zero, and thus we need to fix the economy. We need to restore our productive sectors and bring back investors who left as a result of the outbreak. We need to reactivate and strengthen our institutions ranging from education to jobs. Government is nearing a point where it might be unable to meet its current wage bill. Indeed, private sector growth is a vital part of our strategy, as is restoring electricity, water, and other public services, including the cash assistance programmes for vulnerable populations

## MALI



President of Mali, HE President Ibrahim Boubacar Keita addresses the 69th UN General Assembly at the U.N headquarters in New York September 27, 2014

## An interview with President Ibrahim Boubacar Keita

### What is the current situation with Ebola in Mali?

Our Ebola response coordination mechanism started on 23 March 2014, the day after the disease appeared in our neighbouring country, Guinea.

Mali's first case of Ebola was declared in October 2014. It involved a two-year-old girl who had travelled from neighbouring Guinea to the town of Kayes, 600km from Bamako, where she sadly died. Everybody who had been in contact with her was placed in quarantine and monitored regularly. At the end of the 21-day incubation period, which ended on 11 November 2014, no other cases had been found. We declared this outbreak of the disease closed.

Unfortunately, there was another case in Bamako the following day, this time involving a patient who had come from Guinea and who was admitted to a private clinic. By 24 November 2014, this outbreak had claimed four lives and a further case of infection, which is now being treated. At that stage, 270 people were being monitored. The government took swift action to improve monitoring of the border with Guinea and I myself went to Kourémalé, a town on the border, to inspect the measures. As

for the healthcare system, this has performed well but we need to ensure that we strengthen it further, especially with the support of the World Health Organization and all our partners.

I personally called for a general mobilization of all Malian citizens, to make the response to Ebola a major national cause, with everyone, at all levels, committed: elected officials, traditional leaders, religious leaders, teachers, artists and the general public. Everyone must do their utmost to raise awareness and send prevention messages so that Ebola is soon no more than an unpleasant memory.

### What are your most pressing needs as you respond to the situation?

We needed healthcare materials, which were provided by the WHO, China and France, for whose support I am sincerely grateful. We now need representatives in the global media to publish an objective account of how Mali is responding to the disease without exaggerating the situation and avoiding any kind of stigmatization. We must ensure that this country, which is already in a precarious situation, is not destabilized as a result of a small number of cases of Ebola triggering a fall in tourism and investment. These consequences would be very damaging to our economy. Therefore, we need the media to stress that some countries, like Nigeria and Senegal, have eradicated Ebola, in spite of the cases that appeared there, and that Mali is on the way to achieving this. We would also like to invite them to come and see the situation for themselves. In this regard, the World Economic Forum can be a good representative for us.

### What mechanisms need to be put in place to ensure a prompt and effective response to international crises in the future?

We believe we need to strengthen our permanent crisis committee in Mali, which can be activated as soon as a crisis arises in one of our region's

countries. The Economic Community of West African States should also have a rapid response mechanism that includes 15 countries, so that the response from the region is a coordinated one. The same mechanism should exist in all regions of Africa and the whole world.

### Are there lessons to be drawn from the Ebola outbreak that could be applicable to non-medical pan-regional and global crises?

Yes. It is essential that states continue to support each other and that warning mechanisms be established on an international level to enable a global response adapted to each setting, regardless of its nature.

### Clearly, the immediate concern is to halt the spread of human tragedy, but Ebola will also leave an economic legacy in the region. What is your assessment of the tools and international assistance that will be needed for a sustainable economic recovery?

As I said earlier, it is important not to stigmatize the countries affected, because this would obviously weaken their economies. This is broadly the case in Guinea, Liberia and in Sierra Leone. Perhaps a massive investment plan – a sort of Marshall Plan – should be implemented as soon as possible to revitalize these economies, and thus create a virtuous circle from which the entire West African region can benefit. International leaders, business leaders, heads of international institutions and top-level political leaders should also travel to these regions to send out a message and show that these countries are not in quarantine, and that now precautions have been taken it is still possible to live, do business and travel there in almost normal conditions. This was the purpose of my visit to Guinea and Liberia in October 2014, where I wanted to get a first-hand look at solidarity in Mali.

## SIERRA LEONE



President of Sierra Leone, HE President Ernest Bai Koroma, speaking at the Clinton Global Initiative in New York

## An interview with President Ernest Bai Koroma

### What is the current situation with Ebola in Sierra Leone?

Since the first cases of the disease in Sierra Leone in May, over 4,400 of our people have been infected, of which there are a little over 870 survivors. Most of the dead are women and over two-thirds of those infected belong to the most economically active age category of people between the ages of 15 and 50. Non-Ebola illnesses are adding to the death toll and increasing suffering, as the national healthcare delivery system is under further strains and being weakened.

September and October were challenging months for the country, as we saw the greatest increase in number of people infected by the disease. But it was also a period of increased international support and surges in our capacities to fight the illness. The UN held a special session on Ebola and established in record time the United Nations Emergency Ebola Response Mission; the World Bank and IMF have approved resources to fight the disease. The British are sending nearly a thousand personnel here and are building several treatment centres with laboratory capacities. In November the governments of the United Kingdom and Sierra Leone organized a conference in London to gear up international support for the

fight in Sierra Leone. Lots of pledges were made at the conference. The Cubans have provided health workers; the Chinese have provided medical equipment, a lab and health workers. The Americans are sending over 4,000 soldiers. Most of these would be stationed in Liberia, but the effect would be to reduce the infection rates in the region and provide necessary logistics and training support to the other countries most affected by the outbreak.

That countries and organizations have made commitments amounting to hundreds of millions of dollars is great, and it is worthy to note that the number of countries and organizations that have disbursed or delivered on their commitments are increasing and helping the fight. But a lot of the commitments made have not been disbursed; they are not yet facts on the ground, and it is only when they become facts on the ground that they can be utilized in the fight against Ebola. There is therefore great need for countries and organizations to accelerate efforts at getting these commitments on the ground. There is a gap between commitments made, resources disbursed and stuff on the ground.

Over 80% of the personnel on the ground fighting the disease in the country are Sierra Leoneans. Sierra Leonean doctors and nurses provide most the frontline services at treatments and holding centres; Sierra Leoneans are the contact tracers, they are the burial teams, and they constitute the bulk of the staff in international organizations supporting the fight against the disease. The largest treatment centre in the country, which has 120 beds and was opened in September, is run by young Sierra Leonean doctors, and they have since ensured the survival of over 200 people infected with the virus. But the disease is new to us; local capacity to stop the virus is clearly not enough and more international support on the ground is required for us to stay ahead of the virus.

### What are your most pressing needs as you respond to the situation?

Our objective now is to break the chain of transmission of the disease and stop its spread. The way to do this is to ensure safe burial of those who have died of Ebola; remove the infected from communities and put them in holding and treatment centres; and hasten Ebola tests. We have started scoring successes in ensuring safe burial; we are also increasing the number of treatment centres and lab facilities to conduct tests for Ebola. But more needs to be done.

We seek effective and enduring partnerships at three levels of direct intervention: the household, the community and the treatment centre. To get ahead of the virus, we need strategically placed treatment centres, with each centre holding 50 or 100 beds. With support from our partners, including the British, the Chinese, Médecins sans Frontières, the Red Cross and others, we currently have five treatment centres. The total bed capacity of all these treatment centres is 387. This is smaller than the minimum 1,000 bed capacity needed in the country to stay ahead of the virus. There are two fairly big holding centres at Lakka and Port loko and a number of smaller holding centres in the country. Treatment centres are being built in Bombali, Port Loko, Moyamba and Freetown, but their total bed capacity would not get us to the estimated number of beds needed. Infection patterns are shifting geographically. Hotspots at the initial outbreak of the disease are registering very low infection rates, and other areas have seen spikes in infection rates. These areas need treatment and holding centres; treatment centres are needed in Bombali, Koinadugu and Freetown, and large holding centres are needed in Kambia and Pujehun.

Treatment centres need personnel, for without them, treatment centres are non-operational. For Ebola treatment, the health worker to bed ratio is 3.5 personnel per bed. Thus a treatment centre of 50 beds would require 175

personnel to run it, with the ratio been 25 doctors, 100 nurses, and 25 other health workers to effectively and safely operate it. A 100-bed treatment centre would require 350 personnel. The personnel would work in shifts to ensure safe and effective care of patients. We seek support in getting more personnel to the country, and in training for national and other health workers in the country. Ending the outbreak will require more doctors, nurses, infection control specialists, hygienists, epidemiologists, nutritionists and counselors. We are heartened by pledges from African countries to send in hundreds of health workers, and the African Union's coordination of this effort; we also welcome the pledge of 30 million dollars by African businesses to facilitate the deployment of these health workers to the rest of the region. But speed is of the essence if we are to get quickly ahead of the virus.

With support from our partners, including the World Bank, the UN, the British and others, we have increased the availability of critical logistics and equipment, but more needs to be acquired. These include ambulances, vehicles and motorbikes, personal protective equipment, IV fluids, antibodies for superimposed infections, vitamins and food supplies. An additional 40 ambulances are needed to service the nationwide network of treatment centres and community Ebola care units; more motor bikes are needed for contact tracers and 20 to 50 4WD utility vehicles are needed for supervisors, surveillance officers and burial teams.

Lab services are very critical in all this for diagnosis suspected cases and confirmation of causes of death to ensure safe burial practices. With the aid of the South Africans, the Chinese and the British, lab capacities in the country are increasing, and most of the new treatment centres that are being built with support from the United Kingdom will have lab facilities for testing Ebola. But getting ahead of the virus requires more, especially mobile labs that could be moved to hotspots of new infections to get quick results and remove infected people into treatment centres. Labs are gateways to treatment centres; unless they

function properly, infected people could remain in the community, continuing to transmit the disease. These labs are required for a quick turnaround between taking samples and presenting results.

Millions of dollars are also required to pay the thousands of health workers that would be deployed; millions of dollars are needed to shore up drug, food and other basic supplies and logistics.

At the community level, a package of support is needed to take those showing signs of the disease out of households and into community Ebola care and holding centres, pending confirmation of tests and transfer to treatment centres. The country needs a network of small 20-bed capacity community holding centres in our various chiefdoms. Because of the urgency of the situation, these community Ebola care centres could be easily deployable well-fitted tents for now, as we move to build stronger physical structures in the medium term.

Ebola is a disease of the household, and this makes family members the first responders to the illness and very vulnerable to getting infected and spreading infection through common household practices like touching the sick and mourning the dead. Support is required at the household level to enable households to safely deal with instances of illness, bereavement and temporary isolation. The package of support would include simple protective materials, logistical support and personnel to visit quarantined homes daily to offer a range of services, including health check-ups, information-sharing and removing the sick from their communities.

### **What mechanisms need to be put in place to ensure a prompt and effective response to international crises in the future?**

The international community should acknowledge that viral diseases are becoming diseases of the world, and not of any particular region. Viral diseases are no respecters of boundaries in a world of expanding human habitants, bringing humans

everywhere into greater contact with mutating viruses. Globalization, increasing urbanization, faster transportation and denser networks of people moving between rural and urban areas and across borders is fuel for more rapid spread of formerly isolated viral diseases. Examples here include SARS, HNI, Marburg fever and a host of other zoonotic transmissions. Regions of the world may feel immune to these outbreaks, and can be caught unprepared. In West Africa, we had a slow response at the initial stages because of the absence of this type of acknowledgement. None of us recognized this confluence of trends – urbanization, faster travel, expanding human habitants and increasing zoonotic transmissions – could emerge with such force in West Africa. The newness of the disease to us meant that we could not identify the index cases in time to activate existing response capacities. That we missed out on the index cases allowed the virus to infect more people and spread to more areas. Our international partners were also not prepared to support identification of the index cases, and the disease had infected many people before it was identified as Ebola. And by that time many who had the disease but were still asymptomatic had moved on and could not be traced. Other countries in the region, more alert now because the disease is in the region, were able to identify index cases, and this has helped them to halt the spread of the disease.

But we must note that at the initial stages in our countries, governments and the international community were slow to recognize the threat, and when the recognition did come, it came with a flurry of fear that led to closing off travel to and from Sierra Leone and our region.

But the panic was also a result of the world's failure to recognize the global trends and possibilities of viral outbreaks. This acknowledgement is slowly beginning to emerge, but it is an acknowledgement that must lead to a restructuring of the global health infrastructure to better prepare for and combat these outbreaks. This restructuring is gradually emerging, as could be seen in the establishment

of UNMEER, the very first mission of the UN created in record time to fight an outbreak. The mission is recognition of the fact the existing global health response mechanisms are not comprehensive or robust enough to deal with the new challenge, and that something new must be built. We hope that UNMEER will also result in the creation of a more permanent institutionalized template for dealing with outbreaks everywhere in the world, like we have with the United Nations Office for the Coordination of Humanitarian Affairs, which coordinates and facilitates surge capacities for dealing with other humanitarian disasters in the world.

We would expect such a body to also work on the relationship between available knowledge, pharmaceutical companies and the development and deployment of vaccines and therapies. The knowledge needed to make vaccines and possible therapies for viral diseases like Ebola exists, but not much attention was given to this until we had this very big outbreak. We are encouraged by meetings going on between governments, the World Health Organization, research institutes, and big pharmaceutical companies in relation to the vaccines and drugs being developed for Ebola. We would like to see permanent platforms for these engagements on how to optimize the interests of global health without harming outlays for research, innovation and other concerns. But we believe concerns for global health should be given much more priority in the development of vaccines and drugs than has been the case. From what we understand, research into and development of vaccines and drugs for Ebola were hampered by the idea that these viral diseases are diseases of poorer regions of the world, and do not warrant the time and effort of corporations, whose greater concern is returns on their investments. But permanent platforms would introduce other priorities into medical research and investments, particularly that of global health.

Also, we expect support in rebuilding our health infrastructure. Ultimately, national health infrastructures are first responders to an outbreak, and they

must be able to hold the fort against emerging viral threats until international help comes. In Sierra Leone and the wider West Africa region, this would mean support in establishing national viral infection control or public health institutes with surge capacities.

We know that the present Ebola response is an emergency response but sustainability must be integrated into it to enable us to respond more quickly to any recurrences of Ebola.

**Are there lessons to be drawn from the Ebola outbreak that could be applicable to non-medical pan-regional and global crises?**

Crises are now all interlinked, regionally and in relation to sectors. A crisis may start as a health emergency but could quickly mutate into more than a health emergency to become a security, humanitarian, food and economic emergency. The security and terrorist crises in parts of the Middle East are also health, humanitarian, food and economic crises; the natural disaster that hit Haiti some years back was also a security, health, governance and economic crisis. We should also not regard these crises as solely regional crises; their effects spill into other regions. A particular region or sector may trigger a crisis, but increasingly crises spill into other sectors and regions. This thinking should inform international responses to crises, including non-medical crises.

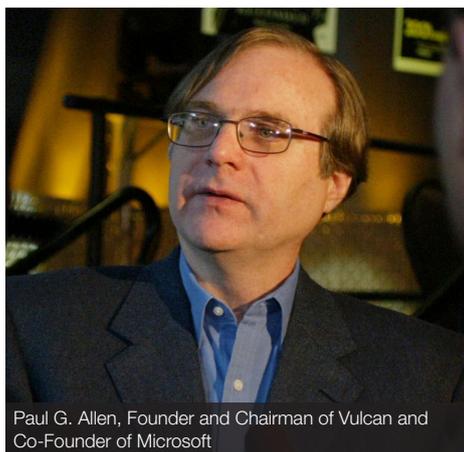
**Clearly, the immediate concern is to halt the spread of human tragedy, but Ebola will also leave an economic legacy in the region. What is your assessment of the tools and international assistance that will be needed for a sustainable economic recovery?**

The economic disruptions are already being felt. In Sierra Leone we were implementing policies that were making our country one of the fastest growing economies in the world when Ebola struck. Prior to the outbreak of the disease, the economy grew by 14% in 2013 and was projected to grow by 11.3% in 2014. But the disruption to agricultural, mining, manufacturing, construction, tourism

and transportation following the outbreak of Ebola has resulted in a projected slowing down of economic growth to 5% in 2014. This poses a significant threat to livelihoods, human development, state security and poverty reduction. With an estimated revenue shortfall of \$90 million, government coffers are drying up; and the shortfall may jump to \$215 million if the disease is not contained by early next year. Based on our preliminary revised projections, economic growth will slow down to 5% in 2014, from a projected growth of 11.3%.

We are developing a post-Ebola recovery plan. The plan is based on a warrant to speedily expedite socio-economic recovery and reduction of suffering from the disease, and to reclaim the path to sustainable development that our country had laid out before the outbreak of Ebola.

But the government cannot ensure this without substantial international fiscal and other support. A big fiscal gap is developing, and we need to close it. Private companies that are emerging as the backbone of our economy in terms of job creation and government revenues have been badly hit, and support is needed to get them to full productivity. The World Bank and other international groups have recognized this and are providing funding towards this. On November 5, the World Bank announced a package of commercial financing to enable recovery of the private sector, trade, investment and job creation in the countries hardest hit by the Ebola outbreak. This is great, and more support along these lines is required, including actions to reverse crippling international flight bans, and in destigmatizing our region. The rapid development of a vaccine and therapy are critical not only to ending the current suffering, but also to destigmatizing our region. This is necessary to ensure the return of investors and essential expatriate staff, boost job creation, and generate the revenue required to close financial gaps and ensure sustainable growth rates. This would help increase investment in healthcare and other services to improve human development outcomes and combat future outbreaks of viral and other diseases.



Paul G. Allen, Founder and Chairman of Vulcan and Co-Founder of Microsoft

## Interview with Paul G. Allen, Founder and Chairman of Vulcan and Co-Founder of Microsoft

**You've committed to donate \$100 million on top of the millions you have already given to fight Ebola. Can you tell us: why Ebola and why now?**

Last summer I realized that the exponential spread of Ebola is unlike any other global health issue and requires strategic and nimble solutions to stop it. I got involved in this effort early on because Africa and the people of Africa are close to my heart. But, as this outbreak has spread, and more than 5,000 people have lost their lives, my concern has extended well beyond Africa. This is not just an African issue; this is global health crisis that affects people everywhere. Containment of past outbreaks proves that with a tightly coordinated and resolute response, Ebola can be stopped.

**Can you provide some insight into how you determined that \$100 million is the right amount to donate? And do you have an estimate for the total amount of money that needs to be spent to solve the Ebola problem?**

An outbreak of this scale requires significant resources. We're up against an extremely tough opponent. This disease – and the needs to combat it – is growing at an exponential rate and that requires an equally large response from the world. The \$100 million commitment was designed to do two things: target needs that were not being filled, and catalyze donors large and small. To date, more than half has been committed to projects working to prevent and treat the effects of Ebola. It's been great to see how other private sector and governments have stepped up, too.

**Your donations to fight Ebola are aimed at a wide range of needs, from medical facilities to providing medevac support for healthcare workers. How important is it that the Ebola problem is seen in this multi-dimensional way?**

Our approach to Ebola is consistent with our overall philanthropic philosophy to find the critical unmet requirements and step in with funding, resources and innovation. We are focused on the most pressing needs including education, training and support for healthcare workers, delivering supplies

and resources, and supporting data access. This is a fight that must be waged on many fronts and we will continue to step in where we can make a difference.

**One of the challenges in raising public awareness about the outbreak of Ebola is to communicate the potential it has to become a pandemic while at the same time trying to avoid hysteria. Do you think we can learn lessons about how this difficult balance might be better achieved in the future?**

Yes, I believe the work happening to combat Ebola will provide us with data that we can use in the future. One of the core tenants of my approach to philanthropy is measureable data, and this work on Ebola is no exception. It is important to educate people about Ebola and how to prevent its spread in an informed manner. The focus must be on what people can do to contain and prevent the disease at its source in West Africa. Ultimately we have the power to overcome the outbreak and save lives if everyone globally steps up their response.



"It is important to educate people about Ebola and how to prevent its spread in an informed manner." Paul G. Allen

## GAC Special on Ebola



How can more health workers be mobilised?

### Findings from a special call on the Ebola Outbreak with members from various Global Agenda Councils

#### Learning from the Ebola crisis

The Ebola outbreak in West Africa has presented severe challenges, not only for the region, but for the entire international community. It has also offered an opportunity to learn vital lessons that can be applied when the next global health emergency hits, as it inevitably will.

These lessons can lead to a far more coordinated response, with fewer initial barriers to action, the better exchange and analysis of information, and more effective dissemination of knowledge.

#### Learning through best practice

An effective method of ensuring that lessons are absorbed and applied is to collate success stories and disseminate them widely as examples of best practice. The private sector has started to do this, working with the United Nations. Such knowledge sharing is aimed at attacking Ebola outbreaks in the future, but can also be readily adapted and applied to other communicable diseases, such as SARS or flu pandemics, experts say.

It is remarkable, they point out, that Ebola outbreaks have occurred for more than 40 years and yet the international community always seems surprised that they have occurred again. The opportunity to avoid this surprise in the future – and so to be able to act more quickly and efficiently – must not be lost, they argue.

#### New finance models

One of the barriers to rapid mobilization during the Ebola crisis has been a lack of financial support. To tackle this problem, discussions are already in progress to establish innovative ways to fund the response to potentially global pandemics and outbreaks of disease. New ways of funding, such as a global health security fund, mean that in future the private sector could participate and offer support prior to a crisis and, “we won’t have to be literally passing the hat seeking donations from all quarters, waiting for pledges to be actualized, and thereby significantly constraining the response.”

Models already exist where companies fund NGOs and needed products, but the effort should be globally coordinated, experts agree. One key lesson from the Ebola crisis is the need to avoid having to act in an ad-hoc manner.

#### The current situation

The situation on the ground is improving, experts report. More treatment and care units are being built, more people with the virus are being treated, and more of their contacts are being traced.

There have also been noticeable improvements in behaviour to reduce the risk of infection by populations in the affected areas; but, given the scale of the task, much greater efforts are still needed.

United Nations officials, including the secretary general and the special envoy on Ebola, have been in constant touch with many world leaders to emphasise a clear message: “When people are diagnosed early with Ebola and they can access medical care, the survival rate

is very high and the transmission of the virus is reduced.”

Experts stress that this is the route to control the Ebola outbreak – and it is achievable.

“We can do it, we know how to do it; but we need to do it together in a very coherent and constructive manner.”

What is needed now are more trained and disciplined teams of responders, including case workers. Currently, many nations have offered personnel to work as responder teams to run the Ebola treatment and community care centres in affected countries. More recently there was an initiative by the African Union and the Regional Economic Commission in Africa to encourage more countries to provide personnel.

#### Economic impact

As the Ebola outbreak spread, it soon became clear that the crisis was going to have an effect far beyond Africa. Addressing it requires a radical and massive international response from all who can provide support, including business sectors.

The outbreak is not only a healthcare issue, but also an economic one.

There are urgent issues involving supply chains, there are financial implications, and there are negative effects on travel, tourism and many other industries – in fact, experts predict that no industry will escape the economic effects of the outbreak. All of these sectors will have knowledge and experiences to share to help better deal with the next crisis; it is therefore important that this experience is assimilated widely.

Experts say there are three important components to the economic dimension: media containment of panic and harmful, ill-informed reactions; the rebuilding of economies; and future preparedness, which includes rapid mobilization.

The most obvious economic impact so far has been on airlines and shipping companies. The response from the private sector has been swift. One example is the establishment of the Ebola Private Sector Mobilization Group (EPSMG) – a collection of commercial and corporate firms that want to support the affected regions. This business-to-business group has now grown to 70 companies, all heavily invested in West Africa.

The group's first aim is to be able to remain in the region and provide services to help stabilize the economy, drive development and social recovery, and also support the Ebola response effort. For this to be effective, it is important that trade and humanitarian air, land and sea corridors remain open.

As time goes on, the potential economic effects of the crisis grow and spread to a wider geographical area. The introduction of restrictions on trade in the region could be disastrous, say experts, and would be likely to have a knock-on effect on communities. If businesses close, and if agricultural products do not get into the affected countries, the effect could be to turn what was initially fundamentally a healthcare emergency into a full-blown humanitarian emergency. It is vital that this concern is voiced effectively and is widely understood, say experts.

An adverse – and irrational – response has already been seen, they say, with the recent restrictions enforced in several countries on people travelling from the main Ebola-affected countries. Among others, this affects returning care workers. Experts say there is an urgent need for these “unscientific” restrictions and quarantines to end.

It is essential to prevent Ebola-affected countries from being isolated socially, commercially and politically. Restrictions on travel, experts warn, could encourage other sectors to introduce similar restrictions, bringing about increased isolation. The travel industry must therefore be encouraged to support the affected countries.

### Role of the private sector

The private sector has been relatively quick to recognize the potential economic impact of Ebola. Although healthcare agencies have looked for the private sector to provide more funds, its level of engagement in other areas has been much deeper than during previous emergencies.

The EPSMG is one example and it represents a resource that is already being tapped from outside the business group. Among other things, it is able to share best practices and experiences. It also allows agencies to see which companies have what assets on the ground, which can provide investment and help with many of the logistical constraints faced by the UN and international responders.



How would improved funding models enhance treatment units

Resilient West Africa is an example of another project. This is initially focused on short-term development projects and ensuring the continuation and infusion of resources, keeping money flowing into the region and establishing more effective supply chains. A second phase will target longer-term development projects, to ensure there is interest from investors and development agencies.

Agencies are also working with the private sector in the areas of healthcare, not only regarding possible vaccination programmes, but also on the development and utilization of personal protective equipment.

Further involvement with the private sector will be needed in such areas as cold chain supply to ensure that once vaccines are available they can be maintained in a difficult environment across highly inaccessible areas of West Africa.

Transportation has been a key factor during the crisis and agencies are working with a number of private logistics companies to improve the delivery of supplies and to open roads and clear lands for the establishment of medical facilities.

### Information technology

One lesson from the crisis that will be applicable in the future is the essential role of IT services in providing information and communications, especially through the telecom sector and through software to analyse data collected by healthcare workers in the field.

This analysis and dissemination of data is essential to both trace and track the spread of disease and to provide a network for medical services. It is also necessary for ancillary activities, such as the transmission of payments to healthcare workers in otherwise inaccessible areas.

Communication in the widest sense is also essential for spreading knowledge of the disease: how people are infected, what measures they can take to protect themselves and others, what they should do if they fear they may be infected, and so on. It is also essential for broadcasting factual information that separates myth from reality and so dispels some of the stigma that accompanies such a dreadful disease.



How will the concerned economies recover the effects on travel, tourism and other industries?

## Confronting Ebola

by Daniel F. Runde, Member of the Global Agenda Councils of the United States of America



How well do we understand the link between the lack of hospital beds and the number casualties?

The international community and the United States have not responded with sufficient speed or resources to the current Ebola outbreak. If rapid steps are not taken by national and international health authorities, it could result in millions of deaths, significant damage to African economies, and a global pandemic. The panic around Ebola could also have major global economic impacts, particularly on travel and trade. American security will depend on solving Africa's Ebola challenge.

Ebola hemorrhagic fever (EHF) has a 50-70% death rate. The current outbreak has been in Liberia, Sierra Leone and Guinea. It is estimated that by November, 21,000 people will be infected by Ebola, but this is likely inaccurate as many cases are never reported. As of today, no Ebola vaccine exists. As of mid-October, 10% of the infected have been healthcare workers, implying an imminent breakdown of whatever healthcare system exists in these countries.

The level of danger posed by EHF is based on five factors:

1. *Efficiency of transmission:* Ebola is currently only transferred through bodily fluids, which is a relatively inefficient mode of transmission.
2. *Death rate:* A 50% to 70% death rate puts Ebola on par with the deadliest diseases known to humanity.
3. *Incubation period:* Symptoms start to show between 3 and 21 days following infection. However, the Centers for Disease Control and Prevention says the following: "A person infected with the Ebola virus is not contagious until symptoms appear." <http://www.cdc.gov/vhf/ebola/pdf/ebola-factsheet.pdf>

4. *Viral mutation:* There are five known viral strains of Ebola. The speed of mutation means that even if we had a vaccine, it could become ineffective in a short time.
5. *Weak health infrastructure:* Sierra Leone, Guinea and Liberia have a very weak health infrastructure, and very limited quarantine facilities.

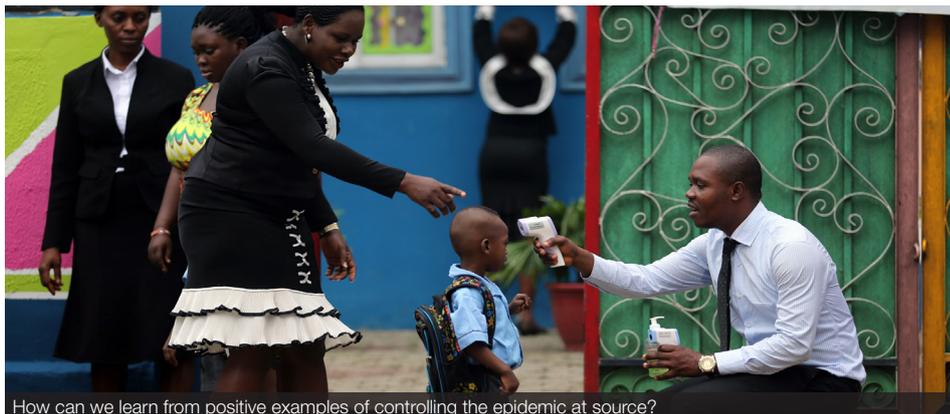
### Economic reverberations

Food shortages are driving up food costs. Staple crops have increase in price by as much as 150%. With farmers in some affected areas not planting crops and many village markets choosing to close, there is potential for famine.

Border closings have had a serious impact on trade. Sierra Leone's finance minister, Kaifala Marah, said the following: "We are facing...an economic blockade."

The IMF has significantly lowered GDP growth projections in Sierra Leone, Guinea and Liberia. There is a potential destabilizing effect on African economies more broadly.

The World Bank reports that if the epidemic spreads, the economic impact could grow eight-fold.



How can we learn from positive examples of controlling the epidemic at source?

### US response

The US strategy was laid out by President Obama at the Centers for Disease Control and Prevention in Atlanta in September. It has four goals: 1) controlling the epidemic at source; 2) mitigating economic, social and political impacts; 3) engaging and coordinating with a global audience; 4) fortifying global health infrastructure.

### Recommendations

1. More health professionals are needed to combat the current outbreak, including military doctors. Ebola responders need special suits and training, which increases deployment time.
2. We must deal with the shortage of beds. Thousands of extra beds for Ebola patients are needed. It is nearly impossible to find space for non-Ebola related medical issues, and as a result people in West Africa are dying of treatable diseases.
3. The production and deployment of bio-hazard containment suits for medical personnel must be accelerated. Dupont is the primary producer, and they cannot make them fast enough.
4. New airlift and logistics capacity is needed in West Africa. There is currently only one airline flying into Liberia. The United States should take the lead on this.
5. We need coordinated efforts on economic support involving the World Bank, the IMF and the African Development Bank. These efforts must look to address long-term economic concerns as well as pressing issues such as food price spikes.
6. We should leverage existing HIV, malaria and polio health structures to address the Ebola outbreak.
7. Experimental treatments and drugs for Ebola need to be fast tracked. A vaccine may be ready for widespread use within a year.

## Ebola: an opportunity to rebuild



Martina Larkin, Senior Director, Head of Global Knowledge Networks

Emerging and re-emerging epidemics pose an ongoing threat to global health security. The recent Ebola outbreak illustrates the urgent need for designing and implementing lasting solutions to global pandemics. Within months of the initial outbreak, over a third of Ebola patients had died, and the disease had spread from West Africa to Europe and the United States, causing global panic and insecurity. The World Bank estimated that the economic burden could reach \$32 billion in the worst-case scenario and \$3 to 4 billion in the best-case one.

The World Economic Forum and its partners are deeply concerned about the impact of Ebola. During the recent Summit on the Global Agenda, held in Dubai from 9 November to 11 November, public institutions and private sector partners convened to discuss how to best support the international community in addressing the crisis. There was unanimous recognition that lasting solutions can come only through cross-industry and cross-sectoral collaboration. Senior executives from a diverse spectrum of industries, including healthcare, telecommunications, education, media, IT, aviation, mining, insurance and finance, offered their expertise and resources. They were joined by policy-makers from the World Bank, the United Nations (UNFPA, Office for the Coordination of Humanitarian Affairs and others), the Global Fund to Fight AIDS, Tuberculosis and Malaria, as well as a number of government officials, non-governmental organizations and academics.

While the objective was to find sustainable solutions, they recognized that the issue of immediate containment cannot be ignored either.



Arnaud Bernaert, Senior Director, Head of Global Health and Healthcare

Thus the discussions focused both on emergency response and long-term solutions in two separate focused sessions. Regarding emergency responses, four topics were deemed essential: 1) humanitarian relief, 2) media and communication, 3) data and technology, and 4) economic recovery. The long-term solutions also centred around four topics: 1) innovative response funding mechanisms, 2) health system resilience, 2) fast-track innovation in vaccines, diagnostics and treatment development, and 4) investments to rebuild economies after the crisis.

Within these topics, the participants identified a number of promising themes that need to be further developed and collectively implemented:

- **Ensuring availability of forward funding mechanisms** to ensure committed funding is made immediately available when a future outbreak happens
- **Developing insurance and reinsurance schemes** for pandemics
- **Accelerating the vaccine, diagnostics and treatment development process** through the definition of clear standards for clinical studies, the creation of incentives for R&D for infectious diseases before an outbreak happens, as well as the elaboration of guidelines for their use (e.g. prioritized populations to use them, approaches for phasing them in, etc.)
- **Establishing a Center for Disease Control** that can serve the African continent and provide surveillance mechanisms and regional, national and international governance for

- adequate and timely response
- **Identifying approaches to rapidly mobilize health workers** in cases of pandemics and for leveraging knowledge and workforces to reinforce the primary care component of healthcare systems after an outbreak
- **Adapting existing technologies**, including radio frequency and GPS-enabled ones, to support health workers and patients in distant areas
- **Launching a platform to serve as a clearing house** for population needs and private sector expertise and resources offerings
- **Nurturing trust in the communities** through effective communication and media activities, targeting respected sources such as community workers, faith-based organizations and others

The World Economic Forum's partners plan to launch a **Call to Action** during the Annual Meeting in Davos this January. To do so, the World Economic Forum plans to host an Open Forum for Ebola, a public session focused on responses to pandemics, as well as a private meeting to discuss concrete actions across the above-mentioned themes. In addition, select group of experts from the Network of Global Agenda Councils will be invited to further offer their skill sets and networks to provide long and short-term cross-sectoral solutions to these urgent needs.

We hope you will join us in this effort to use the Ebola crisis as an opportunity to rethink and rebuild the current system.

With gratitude to all involved,

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