

PODCAST TRANSCRIPT

Podcast title: WORLD: we got this | Episode 2 | A state of innovation

Date: 16/04/2020

Intro: World we got this.

The podcast talking big global challenges with the experts taking them on by the School of Global Affairs the King's College London.

Throughout this series we will be discussing some of the major global challenges we face, deforestation to global pandemics.

In our first season of WORLD: we got this, we'll be speaking with experts about the factors at play during a global pandemic, the differing global perspectives and ultimately the way in which we can meet this challenge. This podcast was being planned long before the outbreak of covid at 19 but all that changed just a couple of weeks ago.

Now of course I'm recording this from home and everyone we speak to in the coming episodes is also going to be working from home.

But the key thing is that they're still working, they're still researching, they're still teaching and they're still trying to understand how we can wrestle with this global pandemic.

Because that is what the podcast is all about so here we go.

James: Hello and welcome to our podcast so I want to mention two things before we get started. Firstly we have plans to talk about big data in this episode and how it's being used to tackle this pandemic but unfortunately the researchers we did plan to speak to have been called away and that will happen time again I'm sure as people go on to try and tackle this coronavirus. Secondly we had some technical issues when we were recording, it meant that we lost some of the sound quality and so we've had to cut and rearrange the episode.

But the key thing is we want to make sure that this episode was kept it has some really important vital lessons about how we defeat coronavirus, in particular some lessons perhaps we can learn here in Europe and in the US from counterpart governments in Asia. This week's episode all about innovation and in particular how innovation can be utilized to help tackle COVID-19 perhaps a more interesting way we try to look innovation as a process and as a theory, how innovation is implemented by both governments and big

business to get the results that we need our first guest is Dr Robyn Klingler-Vidra, senior lecturer in political economy in the Department for International Development at King's College London.

Robyn has worked for a long time now looking at how innovation is implemented across the world and some of the results from that, not just in new technologies but also in terms of societal benefits. As you'll hear some of the insights into the work that's been done in Vietnam and the success it's had during this COVID-19 outbreak are really astounding. I know in recent weeks we've had discussions here in the UK and across Europe about the speed at which governments implemented lockdown but also critically about the role testing plays in helping defeat this virus.

Robyn lays out some really clear lessons from Vietnam, lessons perhaps that we can all take and hopefully this episode and what we've put together will allow us all to hear about those. Our second guest is Professor Kerry Brown is Director of the Lao China Institute here at King's College London. Kerry has been watching closely as this virus has spread from China and he's been looking at how the Chinese government have responded in particular we discussed the role that the state has played, clearly they've been able to mobilize their massive power towards locking down the country.

Perhaps more difficult in this case was a discussion around what role innovation plays in the Chinese state and whether they're capable with their restrictions on civil liberties in developing new technologies and researches that can actually get us out of this COVID-19 outbreak. So here we go a slightly cut down, slightly edited episode for you we did what we could we innovated and as you hear innovation is going to play a key role in helping defeat this COVID-19 virus.

So Robyn reading your most recent research it seems that Vietnam has been incredibly successful in helping slow and in many cases stop the spread of COVID-19. Can you tell us a little bit more about what's happened in Vietnam and how they've been successful?

Robyn: That's absolutely right so the Vietnamese government was really proactive they jumped into this status of high alert at the very beginning of January just days after the virus was reported in Wuhan in fact on January 3rd border controls were tightened, hospitals were placed on high alert for this new type of virus that causes respiratory issues. Now this came way before there actually cases of COVID-19 reported in Vietnam in fact the first cases were reported on January 23rd so full 20 days after they had already moved into this state of high alert, and you mentioned the successes that they've had and you're absolute right to there is increasing coverage of this idea that the Vietnamese state and people have had reasonably remarkable and this effective frugal approach just to give you a sense of the scale and maybe indications of how effective it spent.

As of today so April 15th Vietnam which of course has a large land border with China and a population of just that 97 million people has a total 267 COVID-19 cases and no deaths reported beyond that the 169 cases of the COVID-19 patients who have now recovered. More than 40 of these cases come from one particular cluster the Baqai hospital that has a specialist COVID-19 treatment centre in Hanoi, and I think one thing that's interesting as well as a lot of the cases that have come to Vietnam in recent weeks are in fact returning foreigners visiting the country so in terms of the early response being effective in stopping or slowing down the spread within national borders is extremely effective. We'll talk more about it but just to say the government's role in this is many but one that's been ones that's been really important is that the role that it played in communicating.

The government has communicated from the very beginning that this is very serious, right you can think of the institutional memory of responding to SARS and so the government has been leading a early and strong

charge and using traditional media platforms and also social media platforms to ensure that as much of the population as possible knows about the telltale signs and symptoms and is aware of the virus so this has meant that the Vietnamese people have been acutely aware from the beginning of this year that this was different than the seasonal flu and needs to be taken really seriously. On top of that containment efforts and contact tracing has been extremely systematic.

For example the Baqai hospital that I mentioned before was recently in lockdown for about 2 weeks and entire villages where there are cases discovered are fenced off or you know completely isolated to ensure that there is a complete stop to the spread of the virus in more recently last month on March 10th the government launched a new free app that's now the most downloaded free app in Vietnam it's all about opting in people sharing details of symptoms so that they can better trace who may have the virus.

James: And I understand from your work that they've also been incredibly successful in terms of developing testing capacity can you tell us a little bit more about what they've done and in particular that testing innovation that they've brought about.

Robyn: That's right in fact Vietnam has been exporting its affordable test kits to Europe to show a signal of the effectiveness of their quick response. So Vietnam hasn't been pursuing testing on the same scale as Korea Germany, Singapore, it's made headlines for producing really effective and frugal test kits so this in line with this broader frame of this frugal effective response to the pandemic. Now the way to they did it is again it in back in January towards the end of January, Vietnam's Ministry of Science and Technology organized a meeting on COVID-19 with sort of thought leaders and virologists from across the country and this meeting really helped to instigate the development of affordable test kits it put the development of affordable test kits at the top of the agenda now from that meeting there are a number of well three well known and exported outside of Vietnam as well three test kits one produced by the Institute of Military Medicine, one coming from an institute within the Vietnam Academy of Science and Technology and another as you mentioned coming from university researchers at the University of Technology in Hanoi.

Now these test kits were according to some coverage have said that these test kits should have taken years to produce in the way that they are so affordable to be run, each test to cost no more than twenty-five dollars which has meant that as Vietnam's had to wrap up the number of testing if you know moving beyond the context raising a containment, it's able to increase the volume of testing that it's doing by virtue of this really quick response these three test kits were ready in early March I think March 5th was the date that all three of them were ready one of them was ready a bit before that and they all produce results in a very fast manner so a maximum of eighty minutes just within an hour and a half the tests produce the results and these test kits have been externally validated by bodies in Vietnam they haven't yet been validated by the World Health Organization, but as I say they have been exported to countries around the world including to Europe which I think is an indication of the quality and the hope that they represent.

James: I mean it is striking from your work that they were the Vietnamese government were meeting on January 3rd to discuss the crisis and they were implementing measures long before their first cases had even arisen. It's also striking that they put testing at the heart of their strategy and that seems to be key to their success and that innovation led approach has obvious benefits to the government in Hanoi.

You mentioned SARS early on in our discussion how important was that early crisis for governments like Vietnam to learn the lessons of how to deal with a pandemic has it played a role in the successful attempts to tackle COVID-19?

Robyn: I think that it's a reflection of absolutely the muscle memory of be experienced with SARS being paramount, also being very aware of the large number of daily movements across the border with China and having this sense of urgency that we need to act now we need to have our own means to test we need to have a response systematized in how we are going to get a clamp down on this you know and they didn't wait until we knew quote on quote that there was person to person transmission from the moment that there was word of there's a new SARS like virus in China there was a jump into action and testing and having capacity to test within Vietnam's own governments private sector university with the national borders was of paramount importance.

James: Robyn your work outline for lessons that governments can learn from the Vietnamese case can you tell us more about those?

Robyn: To say what I think that we can take from this in these lessons from Vietnam for me first let's say it is a mobilize or the mobilize or the convenor, the Vietnamese state can be the virologist early on so that there was the chance for the development of local affordable test kits in time right and having these three verified test kits by the beginning of March I think is an incredible feat and something that perhaps wouldn't have happened if the state didn't put this right on the agenda and say OK we have the details of this virus we have the whole genome of the virus here's everything that sort of we know about it. Now you as a variety of different actors across the Military Institute for medicine and the university et cetera across actors, let's get to work on developing means for testing so the state first as the mobilizing convenor.

Second the state has had this essential role in my view of establishing this shared mission and they've established early and reiterated it often across traditional media across newspaper, across TV and also through social media. So you know we're in this together we know that there's this new potentially destabilizing fatal epidemic that's on its way to pandemic status, we all have to act right where part of this nation that that everyone has a role and status in early on this is serious and we all are going to work together I think has been a really important role that the state has played here and perhaps is something that's also noticeably different with some Western economies where the threat was sort of minimized it was 'oh it's happening over there let's wait let's see or it's just a bad case of the flu so the first state's mobilizing convenor to be in second this shared mission this establishment state, third I would say it's taking an approach to innovating that isn't reinventing the wheel if you will. It's innovating on top of existing technologies so these test kits for instance that were developed where built on top of existing technology specifically existing test kits from the World Health Organization from the American Centre for Disease Control and protection so the CDC in the US and going from there instead of thinking we have to do it from the beginning.

The 4th point that I would distill as a lesson from the Vietnamese case which is a really tricky one like I'll say it's and we say it again and again in studying policy and what works well but collaboration across ministries with private sector and with universities. This is the sort of really tricky bit to actually do and in this case of responding to COVID-19 the Vietnamese governments acted across ministries it acted encouraging involving the private sector. So for instance one of the test kits that I mentioned that was developed by the Institute of Military Medicine, it was actually commercialized by a private company who had the capacity to then go ahead and produce large quantities of this which has meant that in Vietnam there's many and they've also had orders to export to over twenty countries.

So this movement across the state from the Ministry of Science and Technology with public health, social affairs et cetera is something that we often don't see, it's a very difficult thing especially in the realm of promoting innovation to sort of bring everyone effectively into the agenda and in this case one of the key lessons of what we can learn from Vietnam is collaborate across governments and with multi-stakeholders private sector and University.

James: Thanks so much Robyn, I mean I would just urge everyone to go and read Robyn's research read her piece on the King's website it really gives perspective of what effective action looks like in the face of this virus. I think there's a lot to learn for governments around the world and so hopefully people take a look at that research and learn some lessons from Vietnam because they've clearly been very effective in helping stop the spread of this virus.

Kerry turning to you first of all welcome to the podcast, now in your role as Director of the Lao China Institute you'll have been watching this pandemic in terms of China's response but also in how it's affected what's been going on in China. I mean clearly they've been able to mobilize the state in order to deliver a lockdown but can you tell us a little bit more about how the state operates in China, in particular the role it plays in helping develop innovation to tackle big national challenges including COVID-19.

Kerry: Yeah thank you, the role of the state in China is you know it's an enabler, it's a mobiliser, it's a commander. So you know the problem is not that it's there the problem is it's everywhere and that can be a big benefit sometimes and maybe in a condition like this it is a benefit but it's also problematic.

The kind of interesting thing is that the virus has been an opportunity I suppose for researchers in China to work with the outside world and the politics has not really gone into the laboratory as yet. There's the Shanghai Public Health Clinical Center School of Public Health they've been working on the initial viral genome and then there's also a group in Hong Kong of course part of China but separate they have been working particularly with partners in the UK to try and work out what the origins of the virus were and also the important issue of the vaccine.

There's also been a suppose more contentious area which is using apps and social media and other kind of technology to track people movements I mean that's been talked about a bit in the UK too and elsewhere you know having this sort of ability to know if people are coming in contact with other people that have been infected with the virus. I mean I guess the problem with this kind of technology of course is that there aren't great restraints on data sharing privacy and things like that in China and so it's not an easy thing for that to be kind of really shared with the outside world. So I guess we're standing looking at the issue today in some areas it's pretty positive the way that Chinese partners have been working with the outside world in other areas it's more problematic I think the conclusion you can really come to is that the Chinese system has loads of resources, it has the capacity and it certainly has the will at the moment but doesn't have the ability.

I mean you know capacity is one thing ability is another I mean it's certainly got a lot of researchers a lot of you know kind of material other resources, but does it have the intellectual capacity or is it absolutely going to have to work with the outside world and I mean does the outside world have the intellectual capacity too I mean that's a sort of different it's a related or different issue at the moment you'd have to say that it's pretty unproven whether China really does have the ability to work as it wants to in this area but it's certainly got the capacity.

James: Robyn spoke earlier about the importance of learning lessons from SARS and that Vietnam had some kind of institutional memory from that earlier pandemic, did China also benefit from that experience and actually knowing how to tackle a pandemic?

Kerry: I remember living in Beijing at the time it happened and the whole city kind of going into lockdown becoming a ghost town and so I mean in a sense what I've seen in the UK has been still pretty amazing but you know slightly less shocking because I had the memory of that almost two decades ago in China. So I think the fact that they had dealt with this slightly for, though not as dramatically was useful, some of the very critical saying they didn't learn the lessons they still try to cover up SARS twenty years ago was known

about quite early doctors were told to keep quiet about it and then it became a bigger problem. So there are structural issues within the whole system that it's kind of antagonistic to people coming along and whistle blowing, but I suppose the important thing to remember is that China's public health system is going through constant evolution its going through constant change and these kind of things once they're over they will create I think significant change.

James: So we've spoken a little bit about the research and innovation that is being used to kind of track and slow the spread of COVID-19.

Robyn thinking ahead to measures that might be brought about so that we can end or partially end some of the lock down how important is innovation and technology going to be to doing that and I guess those countries there are able to better innovate perhaps places like Vietnam, do they have a head start in terms of the economic recovery?

Robyn: Technology and innovation will certainly be essential for coming out of lockdown and just to pick up on Kerry's points of the trade-off between effectiveness and the erosion of civil liberties, its been incredible to watch as a political economist how debates over you know should we give this data you know that and the different systems of the Chinese you know you OR code that shows the different traffic like system of whether or not you can move versus a systems that it's opt in in the Vietnamese act that I mentioned it's something that you download and you choose to opt in which I think is similar to where're doing here in the UK.

I would imagine that these types of apps where hopefully people are choosing to give their data on symptoms, on where they're going will be essential and we've seen just last week you know in the US we've had sworn enemies Apple and Google who have now said last Friday that they will collaborate to develop software that can help with tracking and contact tracing and you can imagine that these types of solutions will certainly be part of the story you know as many analysts have said going into lockdown is a very fast process and coming out is long and much more studied. So the name of the game then I think in ten years to become ramping up testing and having the ability to do that at an affordable pace and across the country and then also this issue of information sharing and it will be something that we've never seen before I think in the scale of what do systems do to both protect their citizens and continue to ensure that they are ultimately the owners of their data and are maintaining their own freedoms and civil liberties.

James: Robyn we spoke about the importance of the state in terms of innovation in a time of crisis and your research points to the role of the state as perhaps convener in mobilising as you mentioned, thinking forward to possible future pandemics but also when we think about tackling other big global challenges, are we going to see the state take a more active role in innovation as opposed to perhaps just leaving it to the market?

Robyn: There's two ways that we could think about how this sort of quote on quote brings the state back in so one of the post-covid states I think will have a more explicit role in setting the social purpose for national innovation systems. So rather than the big innovators the big tech firms innovating in rounds that are going to capture sort of more users, sorry for the pun but sort of go viral apps and things like this and capture the median user who's able to pay and they can get ad revenue from it. The post-covid state will have I think more authority in its voice and saying well here's you know what's the purpose of innovation for society, less of the antagonistic relationship that I mentioned before and more about thinking well these are the directions, this is the agenda and then collaborating with empowering these Silicon Valley type of firms to go from there.

I think second and you know I've done work on inclusive innovation specifically in Vietnam and perhaps it is slightly my wishful thinking but based upon my research hopes at changes in the understanding of the states and innovation after the pandemic or as we evolve with the pandemic, is that there's a movement towards innovation that is with social purpose with greater inclusion at the heart. So a more inclusive notion of innovation, let's focus our best and brightest on moving the technological frontier and developing the latest and greatest capacity in think AI think robotics et cetera and instead thinking how can we motivate innovation that is good for the whole of society that solves issues of inequality, issues of exclusion tackles public health issues, climate changes and sustainability.

So my hope would be that the way in which and the extent to which state and firms I think go about innovation that is socially beneficial becomes much more to the fore I mean one of the things that the pandemic has really been laying bear in a truly brutal way is inequality that comes from this digital divide. That members of society who have jobs, who are able to work from home, having interactions very much like we are now have one version of the crisis that they're dealing with and they're in lockdown but they're still reasonably connected and they're not putting themselves physically into harm's way going out, and those on the other side of the digital divide of course in many cases having a choice of staying home or going out. The essential workers those who physically need to be present in order to do their job and thinking about well what would be a positive to come from this in thinking about the way that we orient innovation activities in this co-ordination between states and innovators is to think about how can we continue to put innovation in a trajectory that is good for the whole of society that has these big social purposes.

James: So a big thank you to Dr Robyn Klingler-Vidra and Professor Kerry Brown.

Next week we'll be joined by the co-directors of the new Centre for Society of Mental Health, we'll discuss how this pandemic and the lock down have put particular strains on our emotional wellbeing and we'll also discuss what government and society can do to help.

You've been listening to the podcast World We Got This, brought to you by the School of Global Affairs the King's College London, to find out more about the podcast and our work head to our website kcl.ac.uk/worldwegotthis. Here you'll find a full list of further reading materials.

This podcast has been produced by James Baggaley and Julia Stepowska, with editing by Rachel Wall. To help us reach more people please rate and review us in iTunes, Acast or wherever you get your podcast.

Until next time remember, World We Got This.