# COVID-19, sustainable development and higher education: towards a recovery path

Walter Leal Filho

*European School of Sustainability Science and Research, Hamburg University of Applied Sciences, Hamburg, Germany* 

Received 2 October 2020 Revised 28 October 2020 Accepted 28 October 2020

Sustainable development

#### Abstract

**Purpose** – This paper aims to outline the impact of the COVID-19 pandemic to universities and how they may react.

**Design/methodology/approach** – A description of the impact of the COVID-19 pandemic to higher education institutions is presented at different levels.

Findings – Even though the COVID-19 pandemic affects higher education institutions in many ways, there are some measures which may be undertaken to mitigate its impacts.

**Practical implications** – The measures suggested may assist universities at present, and in future recovery efforts.

**Originality/value** – The value of the paper resides on a multi-perspective analysis of higher education institutions can do, as part of the recovery efforts in face of the pandemic.

Keywords Pandemic, Sustainability, Higher education, Impacts, Recovery

Paper type Viewpoint

#### Introduction

The COVID-19 pandemic is one of the most significant societal challenges of modern times. Since it has been declared a pandemic, it has spread itself in an unprecedent way (Cucinotta and Vanelli, 2020), a process supported by the current globalisation and movement of people. Here, both industrialised and developing nations are being affected in significant numbers [World Health Organization (WHO), 2020], especially in nations in Africa (Mbow *et al.*, 2020), Asia [United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP), 2020] and Latin America (Burki, 2020). Due to its scope and wide range impacts, the pandemic is undermining the progress so far achieved towards sustainable development as a whole, and in respect of the implementation of the UN Sustainable Development Goals (SDGs) in particular.

Recent models have identified the fact that the overall population is still at a considerable risk (Clark *et al.*, 2020), as the so-called "second wave" follows the surge of infections seen in the first half of the year 2020.

Overall, the pandemic is having severe economic effects, characterised by dramatic reductions in the GDP of virtually all countries in the world - coupled with a worldwide recession – and disruptions to many industries, such as the travel and tourism sector, arts and entertainment, or gastronomy, to name a few. In some cases, the lockdowns have been undermining business models and activities that were previously successful, such as the organisation of conferences, congresses or fairs, as well as sports events, whose numbers and frequency have been significantly reduced.



International Journal of Sustainability in Higher Education © Emerald Publishing Limited 1467-6370 DOI 10.1108/IJSHE-10-2020-0364

Figure 1.

pandemic

The high levels of unemployment associated with COVID-19, especially in the developing world, are also a side effect of the pandemic, which continues to negatively affect their economies. But the impacts of COVID-19 are not only of an economic nature. As shown in Figure 1, they have been wide ranging.

The pandemic has also revealed serious weaknesses in governance and policy-making across many sectors. Regarding the higher education sector, the crisis caused by COVID-19 has also severely affected the standard operations and processes followed at universities. In many cases, the drops in student numbers are forcing many universities to cut costs and reduce provisions for materials and staff to cope with an unprecedented phenomenon.

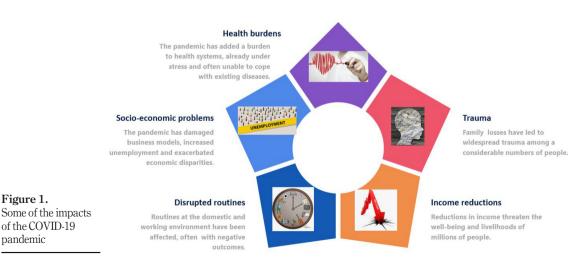
In the field of research, the lockdowns have also led to many challenges, including delays in the execution of research projects. One of the problems is that, due to delays and the fact that some of the running costs of projects – especially those that were expected to be completed in 2020 - still continued during the pandemic (e.g. salary costs, use of equipment and rent of office and facilities), their budgets have often been exhausted. This, in turn, means that substantial financial losses are expected, as the non-planned additional costs will add a further burden to the budgets of universities, some of which are ill-equipped to afford such cost increases.

### The COVID-19 pandemic and sustainable development: paving the way for a recoverv

As far as sustainable development is concerned, the pandemic has shown how much can be achieved through an emphasis on sustainability. Many universities were able to reduce their energy consumption and waste production during the pandemic, whereas others have used the time to reflect on the sustainability of some practices such as business travel by members of staff.

As the recovery efforts now become intensified, there is a unique opportunity to rethink about some of the business models used by higher education institutions, and perhaps revise some practices, with a view to making higher education institutions more sustainable.

A five-point plan that higher education institutions could find helpful might include the following approaches:



- (1) Prepare and implement institutional strategies based on knowledge on how to cope with the virus, coupled with a sustainability approach. Stopping the spread of the virus is a priority. In this context, in addition to measures related to hygiene and social distancing, it is important to reflect on and redesign the ways universities consume resources such as water and energy, identifying ways to curb consumption, lower their environmental impacts and, inter alia, reduce costs as part of institutional efforts to cope with the pandemic.
- (2) Use the wide body of information now available on the many socio-economic and health impacts of COVID-19 as part of teaching courses, also outlining how unsustainable some practices are (e.g. consumption of animal products, unnecessary travel) and reflecting on them.
- (3) Explore the opportunities to expand the spectrum of interdisciplinary research on the connections between COVID-19 and sustainable development. The transformative power of research can help to both cover the substantial knowledge gaps and also generate income by securing external funding for interdisciplinary projects that may, inter alia, alleviate the pressure on the budgets of universities, many of which are no longer able to provide large-scale funding for internal projects.
- (4) Reflect on ways to reduce the carbon footprint of higher education institutions by using environmentally friendly means to reduce the constraints in academic activities and international cooperation. For instance, the large amount of CO<sub>2</sub> emissions associated with the energy needed to power servers for on-line meetings may be compensated by switching to internet service providers whose servers are powered by renewable energy. This is a simple yet effective step.
- (5) Mobilise staff and students likewise, not only to promote measures to keep them safe from the virus but also to reflect on their own contribution towards their sustainability and that of their institutions. For example, during times of social isolation or home office, staff and students can be encouraged to avoid use of plastic packaging, plan the right amount of food needed so as to avoid food waste, or engage in saving energy with home appliances.

The future success of many universities in the long term will depend not only on how they respond to the financial challenges that COVID-19 poses to them but also on how they address the sustainability ones.

It is hoped that the measures herewith described may be helpful in drawing a recovery path, as well as in aiding universities to become more resilient long after the pandemic has subsided.

#### Note

1. The European School of Sustainability Science and Research (ESSSR) https://esssr.eu/ has setup a support programme to those universities which may need support or advice on how to engage of a sustainability path in the face of the pandemic. Interested organisations should contact ESSSR at: esssr@ls.haw-hamburg.de

#### References

- Burki, T. (2020), "COVID-19 in Latin America", *The Lancet Infectious Diseases*, Vol. 20 No. 5, pp. 547-548, available at: www.thelancet.com/journals/laninf/article/PIIS1473-3099(20)30303-0/fulltext
- Clark, A., Jit, M., Warren-Gash, C., Guthrie, B., Wang, H.H.X., Mercer, S.W., Sanderson, C., McKee, M., Troeger, C., Ong, K.L., Checchi, F., Perel, P., Joseph, S., Gibbs, H.P., Banerjee, A., Eggo, R.M.,

Sustainable development

## IJSHE

Nightingale, E.S., O'Reilly, K., Jombart, T., Edmunds, W.J., Rosello, A., Sun, F.Y., Atkins, K.E., Bosse, N.I., Clifford, S., Russell, T.W., Deol, A.K., Liu, Y., Procter, S.R., Leclerc, Q.J., Medley, G., Knight, G., Munday, J.D., Kucharski, A.J., Pearson, C.A.B., Klepac, P., Prem, K., Houben, R.M.G.J., Endo, A., Flasche, S., Davies, N.G., Diamond, C., van Zandvoort, K., Funk, S., Auzenbergs, M., Rees, E.M., Tully, D.C., Emery, J.C., Quilty, B.J., Abbott, S., Villabona-Arenas, C.J., Hué, S., Hellewell, J., Gimma, A. and Jarvis, C.I. (2020), "Global, regional, and national estimates of the population at increased risk of severe COVID-19 due to underlying health conditions in 2020: a modelling study", *The Lancet Global Health*, Vol. 8 No. 8, pp. e1003-e1017, doi: 10.1016/S2214-109X(20)30264-3.

- Cucinotta, D. and Vanelli, M. (2020), "WHO declares COVID-19 a pandemic", Acta Bio-Medica: Atenei Parmensis, Vol. 91 No. 1, pp. 157-160, doi: 10.23750/abm.v91i1.9397.
- Mbow, M., Lell, B., Jochems, S.P., Cisse, B., Mboup, S., Dewals, B.G., Jaye, A., Dieye, A. and Yazdanbakhsh, M. (2020), "COVID-19 in Africa: dampening the storm?", *Science*, Vol. 369 No. 6504, pp. 624-626, doi: 10.1126/science.abd3902.
- United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP) (2020), *The Impacts of COVID-19 on South-East Aasia*, UNESCAP, Bangkok.
- World Health Organization (WHO) (2020), "Rolling updates on coronavirus disease (COVID-19) [internet] coronavirus disease update; events as they happen, 2020. Cited 28/09/2020", available at: www.who.int/emergencies/diseases/novel-coronavirus-2019/events-as-they-happen

#### **Corresponding author**

Walter Leal Filho can be contacted at: walter.leal2@haw-hamburg.de

For instructions on how to order reprints of this article, please visit our website: **www.emeraldgrouppublishing.com/licensing/reprints.htm** Or contact us for further details: **permissions@emeraldinsight.com**