Global Forum, Webinar V 8 December 2021 Session, "Digital Transformation in Times of COVID-19"

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"Challenges of Transboundary Health Protocols in ASEAN under COVID-19: Potentials of digital - analog hybrid frameworks for mobility and health" In this discussion, 'analog' is used to mean having physical properties, that are perceived physically and responded to physically. 'Analog' or 'traditional' knowledge often provides the content for digitization. Digitization may tell us in detail what is occurring. Analog may tell us why.

... Transboundary Health Protocols in ASEAN under COVID-19 ...

What is Transboundary Movement, in ASEAN, and why is it important?

Some major examples are below:

Migration	Displacement	
Labour migration	Political / Economic Conflict displacement	
Poverty migration	verty migrationEconomic Development displacementmate migrationEnvironmental Displacement	
Climate migration		
Voluntary travel:		
Professional / tourism / diplomatic / other		

Despite COVID lockdowns and despite the rapid spread of online meeting technologies, the ASEAN regional economy continues to rely heavily on movement of persons, from professionals and specialists to industrial, commercial and agricultural labour.

The recent health disaster of COVID-19 has caused us to re-formulate and share policies and practices, both for migration and for health,

on the global -- not national -- level, using both digitized data <u>and</u> analog knowledge.

Global Forum, Webinar V 8 December 2021 Session, Digital Transformation in Times of COVID-19 Transboundary Health Protocols in ASEAN under COVID-19

COVID-19 is a health disaster, whose spread is anthropogenic.

Much of the original transnational spread was attributed to human movement.

What are <u>analog</u> forms of knowledge in such disasters, and about what?

Analog formats make more visible the role of diverse human activities and environments in the emergence and intensification of threats, and the construction of "knowledge" about them from "smaller" samples.

Uses of the digital transformation in a pandemic

For the reasons above, COVID-19 has led to multi-state, transboundary cooperation in

- **1.** Health diagnostics
- 2. Health protocols
- **3.** Containment of disease and patient-handling policies
- 4. Allocation of care and caregivers

These protocols traverse national boundaries as well as many sectors, including those of government, health facilities, skills training and employment, and medical equipment.

All of these usebdigitized information, rapid recording and transmission of digitized information, digital storage and recovery of information.

Uses of analog information and knowledge in a pandemic

Looking at the previous slide, we can see that the digitized and urgent information in a health crisis will rely on, or be isomorphous with, analog.

'Analog', or in this case 'traditional' technologies and forms of knowledge are still applied, often with a high degree of accuracy and efficiency, to

- 1. Health diagnostics
- 2. Health protocols
- 3. Containment of disease / patient-handling policies
- 4. Determinations on care and caregiving

Example: number 4, above: Analog methods often rely on <u>natural capital</u>: some ASEAN populations with low income / low education are unable to access adequate modern medical care, but can find, prepare, and more fully understand traditional medicines, which they also find, gather, and use during migration. Global Forum Webinar V (8.12.2021) Digital Transformation in Times of COVID-19

- Q 1. For what knowledge do we need the digital transformation? For what practices?
- Q 2. Why should digital formats and analog formats complement each other?

Health Disasters: Using hybrid approaches, both analog and digital

- Slow-onset Disasters include natural / environmental, socioeconomic, political, and health disasters that become rapid, and extreme, disasters when not addressed.
- Health Disasters are often Slow-onset. From them we learn <u>what to digitize</u>, and <u>why</u>

<u>Case:</u> COVID-19 and Transboundary Movement

Analog findings		Digital Transformation	
⇒	Little-known threats suspected in	individual cases need \Rightarrow	Discoverability (of precursors)
⇒	Precursors need	\Rightarrow \Rightarrow \Rightarrow	Statistical Predictors for discovery of spread
⇒	Discovered threats need	\Rightarrow \Rightarrow	<u>Surveillance</u>
⇒	Surveillance should lead to	\Rightarrow \Rightarrow \Rightarrow	Reliable and rapid statistical profiling

COVID-19 and Transboundary Movement

For the Analog findings in the previous slide to remai useful in hybrid approaches,

there must be preservation of:

- **1. Knowledge of particular patients, not only of patients as conformed to Al-generated statistics**
- 2. Interaction with human behavior, as targeted to outcomes (see 4., below)
- 3. Analog-constructed knowledge of immediate region or regions within which both the original disaster (here, disease) and human mobility occur on a large scale
- 4. Target determinations: here, prevention of spread / cure of disease / reduction of burden

Global Forum, Webinar V 8 December 2021 Session, Digital Transformation in Times of COVID-19 The digital transformation has allowed many kinds of information to become

visible, audible, and recuperable / saveable (salvageable)

Digital and modern technologies have so far assisted [us] to gather more data about hazards,

but they have not yet been as useful as hoped, in addressing, managing, or preventing hazards, <u>especially those that have anthropogenic</u> causes. That is, they have too often remained re-active rather than pro-active. This is where analog inputs are also needed.

There is still a Digital Divide: Digital inputs and analyses are still often vertical. Hazards and disasters require interactive, horizontal inputs.