

Multi-year Expert Meeting
on Transport, Trade Logistics and
Trade Facilitation
8th Session

**Climate Change Adaptation for Seaports
in Support of the 2030 Agenda
for Sustainable Development**

27–28 October 2020

**Climate Change Adaptation and
Resilience Building for Ports in the
Arctic: Opportunities and Challenges**

Presentation by

Mr. Adolf Ng

Professor, Transport and Supply Chain Management
University of Manitoba
Canada

This expert paper is reproduced by the UNCTAD secretariat in the form and language in which it has been received. The views expressed are those of the author and do not necessarily reflect the views of the UNCTAD.

Climate Change Adaptation and Resilience Building for Ports in the Arctic: Opportunities and Challenges

Adolf K.Y. Ng

University of Manitoba, The Hong Kong Polytechnic University

UNCTAD Multiyear Expert Meeting on Transport, Trade Logistics, and Trade Facilitation (8th Session), 27-28 October 2020

© Adolf K.Y. Ng
adolf.ng@umanitoba.ca

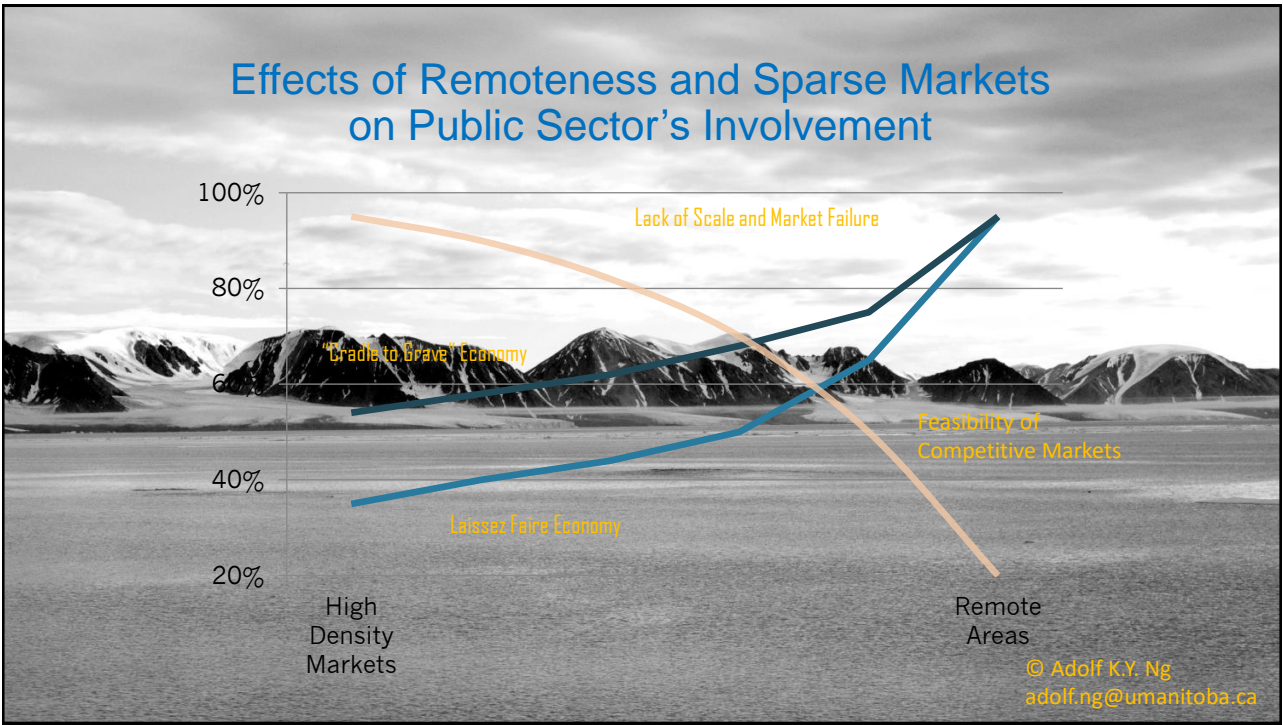
1




2



3



4



Appropriate Approaches to develop Arctic Ports

- **A clear vision for the Arctic Area (AA):** There are pressing needs for decision-makers (e.g., Canadian Federal and Territorial Governments) and right holders (e.g., northern indigenous communities) to develop and possess clear short- and long-term visions on how AA's economy and society could/should be re-shaped by Arctic shipping, including any installation of ports and infrastructures. For example, how should ports and infrastructures transform the connections between the AA and the global economy, while also preserving the traditional society?
- **Bottom-up approach and small-scale start-up:** Initial involvement of foreign parties should be incremental, where collaboration should take care of both 'global' and 'local' interests. For any external investments, the investors should strive to thoroughly understand the unique characteristics, and thus the demands, of the local communities before making any commitments. Any commitments should be 'target-oriented' on specific objectives that are defined under such vision.

© Adolf K.Y. Ng
adolf.ng@umanitoba.ca

5



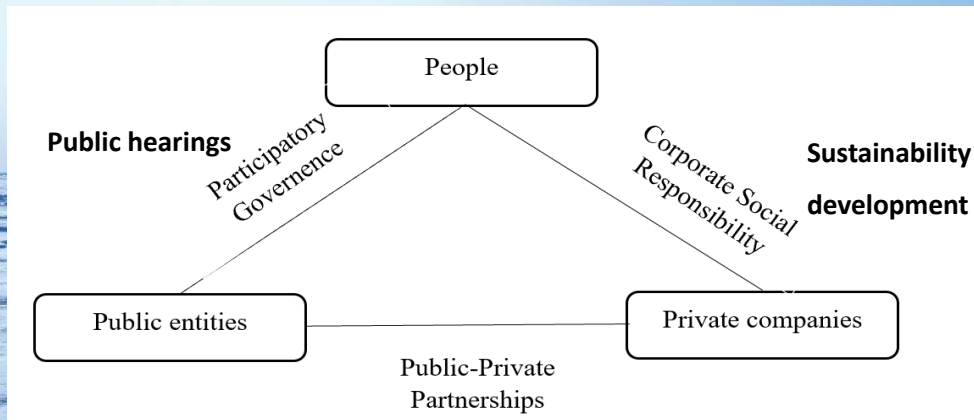
Appropriate Approaches to develop Arctic Ports

- **Ports should be treated as system components:** Ports form important components of 'operational' (e.g., part of a transport network) and 'regional' systems (e.g., part of a local community). Hence, any planning and establishment of ports and infrastructures should not only be treated just as 'isolated projects', where facilities should be planned and installed based on the 'systems' that both the government and the right holders strive to establish.
- **Re-evaluation of the planning process of ports and its governance system:** There is a strong need to re-evaluate the process of port and infrastructural planning in this area, especially on whether the current planning paradigm fits the Arctic context. Also, there is a need for a new management and governance system so that (future) Arctic ports and infrastructures will be operated in a way that fulfills diversified interests and achieves the vision. A 'balanced consortium' should be created that can meaningfully involve the voices, interests, and concerns of the public sector, private operator/investors, and the local community (i.e., the people). **See diagram in the next slide.**

© Adolf K.Y. Ng
adolf.ng@umanitoba.ca

6

A 'Balanced' Approach to Arctic Development



© Adolf K.Y. Ng
adolf.ng@umanitoba.ca

7

Appropriate Approaches to develop Arctic Ports

- **Capacity building for further communication, education, and training:** Different countries (e.g., Arctic vs. non-Arctic) still have diversified, sometimes conflicting, interests on the AA. Thus, meaningful collaboration requires not just cameo, but continuous, communications. The unique physical, economic, and social circumstances in the AA also imply that dedicated education and training programs that involve both local (e.g., indigenous) and overseas knowledge are necessary for the effective and efficient planning, management, and governance of the Arctic ports. The establishment of such capacities (e.g., Joint AA Forum, bilateral training programs for Arctic shipping) will be good initiatives.

© Adolf K.Y. Ng
adolf.ng@umanitoba.ca

8



THANK YOU FOR YOUR ATTENTION

adolf.ng@umanitoba.ca

CCAPPTIA.com

© Adolf K.Y. Ng
adolf.ng@umanitoba.ca