

学位論文の要旨 (論文の内容の要旨)
Summary of the Dissertation (Summary of Dissertation Contents)

論文題目 :
Dissertation title:

Essays on Information and Communication Technology, Poverty, Environment, and
Corruption

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The Sustainable Development Goals (SDGs), also known as the global goals, were adopted by all United Nations member states in 2015 as a universal call to action to end poverty, protect the planet and ensure that all people enjoy peace and prosperity by 2030. These goals are 17 and integrated so that action in one area will affect outcomes in others, and that development must balance social, economic and environmental sustainability. Through the pledge to leave no one behind, countries have committed to fast-track progress for those furthest behind first. That is why the SDGs are designed to bring the world to several life-changing 'zeros', including zero poverty, hunger, Acquired immunodeficiency syndrome (AIDS) and discrimination against women and girls. Everyone is needed to reach these ambitious targets. The creativity, knowhow, technology and financial resources from all of society is necessary to achieve the SDGs in every context, so that the need for partnerships to reach these goals which is the goal number 17 has become the most important among them. The SDG 17 is a call for all contributions at international, regional, national, community, and individual level in term of cooperation (leading coherent policy development (Target 17.14)), assistance (supporting capacity building in developing countries (17.9)), or improving access to sustainable technologies and technology development in emerging economies (17.7), etc. through academic research to make the first 16 goals realizable.

Given the importance of academic research align with the SDG 17, our individual contribution through this doctoral dissertation is to analyze the contribution of Information and Communication Technology (ICT) to reach the SDGs. To do so, we targeted three important ones among them namely SDG 1 (no poverty), SDG 13 (climate action), and SDG 16 (peace, justice, and strong institutions). The important interrogations which will legitimate our endeavor are threefold: (i) why is ICT important to reduce poverty? (ii) why is ICT important to mitigate climate change? (iii) how can ICT contribute to strengthening institutions?

Economic growth is achieved with technical progress which allows many scholars to work on the relationship between ICT and Poverty (Jack & Suri, 2014). Among various types of ICT, mobile money has attractive for the promotion of financial inclusion which is now recognized as a crucial factor for economic growth. Our first essay examines the effect of financial inclusion and mobile money on poverty in Burkina Faso where mobile money has not prevailed yet.

There are two opposite relationships between ICT and the environment namely the unfavorable effects: ICT is positively associated with CO2 due to the life cycle of ICT production and the favorable effects: ICT is negatively associated with CO2 due to green technology. Our second essay analyzes the overall relationship in developing countries.

Corruption is recognized to harm economic growth by weakening institutions. Some studies argue that ICT use mitigates corruption by improving institutional efficiency and transparency (Kanyam et al., 2017), so our third essay examines the relationship between ICT, corruption, and military expenditures by using country level panel data in the Sub-Saharan Africa region which is regarded as the most corrupt region in the world (Willet, 2009).

Our dissertation uses different identification strategies with different indicators or measures of ICT to show the empirical analysis between ICT and the selected three SDGs.

From the results of the empirical analysis, we can notice that ICT reduces poverty, CO2 emissions, and corrupted military expenses for the sake of developing countries.

The first chapter is the general introduction. The second one is related to financial inclusion, mobile money, and individual welfare: The case of Burkina Faso. The third chapter deals with

ICT and environmental sustainability: Any differences in developing countries? The fourth chapter explores the nexus between corruption, ICT and military expenditure in Sub-Saharan Africa, and the fifth chapter is the general conclusion.

備考 論文の要旨はA4判用紙を使用し、4,000字以内とする。ただし、英文の場合は1,500語以内とする。

Remark: The summary of the dissertation should be written on A4-size pages and should not exceed 4,000 Japanese characters. When written in English, it should not exceed 1,500 words.