

Impact of ict on rural development



Rural development may be a changing dimension of development with the fast development of Information and Communication Technology (ICTs).

Discuss

People would like to spend their holidays at desolated places because they would like to connect with themselves. In the past century, humanity became more technological, and Globalization has been giving to human being's other perspective on how to live their lives and how to connect with others in simultaneous time. Moreover, some experts show us how this communication on different ways is not effective when you want to build a relationship through communication, but we must recognize when people use it on a good way its helpful. Imagine professional life without mobile phones, it is almost unimaginable, the world depends on many ways from mobile phones because those ones could store all your life on them. On the other hand, some people have been affected by social networking sites on the internet after accepting an invitation from strangers, and they had to leave their social network websites to take care of themselves. This essay will discuss the importance of the information and communication technologies (ICTs), statistics of the most popular inventions in (ICTs), negative and positive impacts in rural areas, and successful example for the use of ICTs in rural areas.

Nowadays, information and communication technologies (ICTs) has enormous relevance in society. Some people connect ICTs just with mobile phones and their uses, but the true story is ICTs embraces the most important communication development which gives humanity the opportunity to develop personal skills to acquire knowledge. In addition,

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people have an erroneous way to think about ICTs because most of them make an association with technology, but not associated with communication, and it is the keyword of this name, why?. Communication is an essential action between humans, it is not something new or something that becomes with technology. Communication is the emission of a message from a person to someone else through a communication channel which could be called the channel, the civilization has experimented several channels like the caverns drawing by ancient people, the carrier pigeons or letters and passing to the telegrams even in the sending of the emails with the invention on current days the internet, one of the most significant inventions in the last century. Internet changed the evolution of the world which is the best example of Globalization a through the internet you could meet the world, humans do not need to be there physically to know everything about the culture, people do not need to go to China to buy a pair of shoes made in China and just need one click to do it, individuals can access to buy whatever they want in one click. As a result, that is thanks to the information and communication technologies (ICTs) that the world is becoming small, breaking up the barriers of the mercantile frontiers that divide the countries and the consumer societies because people must not be travelling a lot to be in contact with people from other countries.

Every country has access to the ICTs, according to ITU(2018) 3. 900 million of people around the world are already online, this is equivalent to 51. 2% the world's population. That is the point when four out of five people have access to the internet in developed countries and in underdeveloped countries, only 45% of people know and use the internet. Nevertheless, the

use of the internet in the 47 least developed countries of the world is still scarce. Although there is still a gap between developed and underdeveloped countries because it could not compare the infrastructure to provide internet in developed countries such as the United State of America, United Kingdom, Russia, China against to Bolivia, Haiti, Nigeria, Cambodia, etc. Those powerful countries have the capacity to offer to everyone the service and they have also budget to do that. Developed countries have also the development plans that seek growth because of governments know how important are ICTs to the country economy. On the other hand, in an underdeveloped country like Colombia, the governments sold a wonderful telecommunication company "Telecom", a Telco company like Telstra in Australia to receive under the table millions of dollars removing the possibility for the country managed its own company. Telecom had the highest telecommunication structure, they proved phone calls from the capital cities to the tiny towns or vice versa in Colombia, now the government has to pay to a private company to manage the telecommunications of Colombia. However, this multinational company has not paid in full the money from the purchase of telecom but still, that company continues to operate through the foreign operator and continues to increase its productivity with the pocket of the Colombian people. In other words, they are paying the company with the money they are receiving from the plans and services paid by citizens and even more, the taxes that they are paying to Colombia are so low that it puts much more to the public light the bad business that government did with the multinational buying "Telecom".

As the internet became one of the tools par excellence, the mobile network is the world's protagonist because of its reach since most people access to the internet through a 2G, 3G network or higher capacity. The percentage of use of mobile networks is higher than the Internet in the world population (ITU 2018) but it is completely understandable because all mobile companies offer just high technology in mobile phones, anyone could get a regular phone, so people could see the peasant with their typical attire with a high mobile phone technician on his hands even though in the Amazonas. Moreover, citizens of the world have very clear if they want to communicate to interact with others or to make business, they need to contact the external world, and how they will do it, exist one way the Information and communication technologies, and for that society uses different telecommunications devices such as routers, switches, antennas, mobile phones, tablets, laptops and so on to develop their business. Hence, ITCs today sometimes is essential to people who have their own companies.

One an excellent question to themselves is how many companies exist in the rural areas especially in underdeveloped countries when rural areas are a synonym of poverty. In most of the underdeveloped countries, governments do not invest in economic support to help farmers in their development for having a better product or being competitive in the food supply chain compare with the biggest supermarkets which buy almost all the products of this sector. As illustrated by DANE in the third agricultural census, 34 million tons of food products such as tubers (potatoes, cassava, ñame, among others), plantain, cereals, vegetables and fruits all part of the basic diet of Colombians are produced by growers. However, 50% of the rural population

is poor, and the national average remains at a figure of 28%, with the farmers being the producers, these figures were given by the Rural Mission (Cited Ferrari in *El Universal* 31 May 2018). To clarify, rural areas their base of the economy is related to agriculture, so the majority of their products depend on the fertility of the land and caring for animals. In addition, in some rural areas do not have the electricity network to develop ICTs programs, in some of those still nowadays electricity is not stable, and the internet also is limited. On the other hand, exist an enormous gap between urban and rural areas face education because in underdeveloped countries in the rural areas are common people to abandon education, because children have to move around to be at school's places more than 3 hours by walking, riding bicycles, riding horses or donkeys and boats without an excellent vial structure that allows going comfortably or faster to have one class a day. Therefore, many of the inhabitants of rural areas are illiterate, which could be a limitation or be excluded from the large producers, who the majority of them have high education. Otherwise, the government does not take into account the opinion of the rural inhabitants, they just run their projects up or in a few cases they consult them, but just pretend that they participate, so it is not a frequently practice the government building with the communities to achieve a common goal together. To summarise, what reasons could be a challenge to develop these areas through ICTs or to solve a few of them to overcome the gap between rural and urban areas.

One of the negative impacts that can be found on the use of ICTs is the replacement of human-made activities leading to mass layoffs that have a social impact, leading to economic consequences for those who lose their

jobs, without taking into account other important aspects of the life that also have difficulties. Coles is an example of this, the use of machines that read bar codes and register faster than a human being, made manual operation replaced by automation. Just as when large companies export jobs, they move their companies to countries where labour is low cost and where a small number of people do the same amount of work. On the other hand, most growers are accustomed to an active life with the arrival of ICT, their life could be affected by the lack of physical activity turning it into a sedentary being, which affects the heart and other areas of health. In Fact, all farmers are not affluent, so the others who have greater purchasing power, they will be able to buy more technology and the others will be at a disadvantage at the time of competing in the market food. To summarise, in this stage the underprivileged farmers who are going to suffer the negative results of technology if they won't have the government support to acquire technology.

According to the Food and Agriculture Organization of the United Nations (FAO) (2017), there are 500 million families in more than 570 million farms in the world. Climate change, natural disasters, loss of biodiversity, rising food prices, the inefficient supply chain and others are some of the challenges faced by small farmers. The small farmers could overcome some of these challenges and improve their quality of life, thanks to the use of information and communication technologies. For example, Rural communities can increase access to financial services, helping to obtain savings, find affordable insurance and, ultimately, improve their well-being through ICT. Information and communication technologies could improve the quality of

life of many people if they are used in a responsible way by limiting the devices to help them. But how to achieve this when some devices have made man slaves of them. As illustrated by CEA-IoT Colombia (2016), let us think of smart devices integrated into a system that allows growers to measure temperature, humidity and soil quality in each one of their crops. Allowing to know the exact time in which crops should be watered and when to control pests and diseases. Preserving the quality of the products, optimizing production and having better profitability. In addition, this example, remember transportation is a fundamental stage, then the growers need to control how fruits and vegetables travel across the food supply chain may be one of the techniques could be accompanied to a camera circuits inside trucks, it could permit have an efficient and prompt delivery especially when Supermarkets always demand the perfect shape and size of fruits and vegetables meet customers' needs and reject the rest, which contributes to more food waste (Candy, Sheridan & Carey 2016). As a result, it shows a possible development to improve farmers productions with the support of ICTs.

In Africa, more than sixty per cent of the population who are working in the land, but the agricultural seasons have been slow rhythms. Digital technology has been improving farmers resilience to shocks like floods, identifying land improvements, and through accessible mechanization. Most African farmers could not afford to mechanize the industry even though the northern hemisphere had already been revolutionized by the mechanizing. Hello tractor is providing farmers with an affordable alternative. Using a smartphone app, farmers could book tractor services like ploughing, hauling

and planting. they could book through an agent who is paid via a commission if they do not have a smartphone. After the economic crises, Hello tractor decided to focus on technology, to focus on tractor fleet management and the booking app, and we associated with John Deere, whose were fitted with the GPS Hello tractor device. It permits to farmers know how the tractor is being used, such as distance travelled, time in use, and maintenance needs. This association gives farmers training to optimise the tractor use. In addition, Hello tractor has a new partnership with IBM to decide which tractor or operator should be sent out for a particular job through uses artificial intelligence. Artificial intelligence could be the show who might be the best match up to develop a specific task in the land. It helps to improve farmers service during fertilization, sowing and harvesting of crops, and the technology is an enabler for this. From its roots in Nigeria, Hello Tractor is now operating in Kenya, Ghana, Senegal, Tanzania and Mozambique, as well as Pakistan, Bangladesh and most recently India (Price 2019).

In conclusion, this essay has discussed the benefits and challenges of the Information and Communication Technology in rural sectors, and the modern implementation of devices to develop those areas, who need to face the new difficulties in the land relative to climate change and other factors that contribute to farmers implement high techniques to obtain successful harvest. This essay was based on academic sources published between 2016 and 2019. Although the scope of this essay has been limited for the sources to argument the writing, it is clear these strategies can help growers in rural sectors. The governments should develop these initiatives and keep in mind that comparing and challenges can help rural fields to affront the best

solution for taking into an account on their programmes, projects and objectives that they have proposed to help the subsistence of agriculture in their societies. In this essay, benefits overcome challenges allow governments to have to grant rural fields a better quality of life where both parties improve their relationship for a better society because societies could not live without food, and rural sectors could not live under poverty for the rest of their lives. In addition, the governments have a responsibility in the development of the capabilities of the people in their countries, and most in the fields where people do not have access to an education like the case of rural sectors. they are conscious people live from agriculture, without food who will plant food to feed the world if it is not growers.

Referent List

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