

Assessing Intangible Benefit of Mobile Telephony on Agrarian Rural Community of North Shoa, Oromia Regional State, Ethiopia: The Case of Habado kebele

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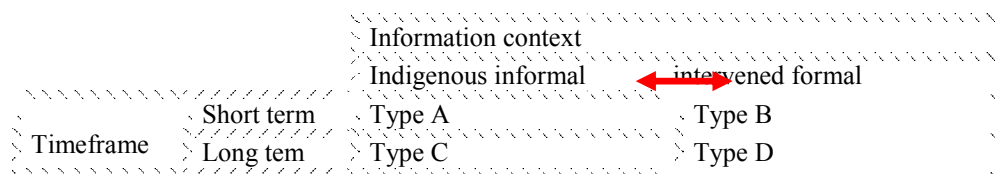
Abstract

This study focused on Assessing Intangible benefit of mobile telephony on agrarian rural community of Hidabu Abote Woreda, North Shoa, Oromia Regional State, Ethiopia: The case of Habado kebele. Data were collected through the use of focus group Discussion, key informants and personal observation. The key informant interview was conducted with developmental agent, administrator of kebele and elders to get real information about the problem. The focus group discussion was held with the kebele elders that were selected randomly to collect the relevant data. Researcher also collected available data by observing mobile telephony related situation. Qualitative data generated from these sources were compiled, organized, summarized, interpreted and narrated based on the concept of Intangible benefit of mobile telephony on agrarian rural community. Likely the result of the discussion revealed that intangible benefit of mobile phone on agrarian rural community were tremendous. Accordingly, farmers' confidence, competitive advantage of farmers, discussion ability of farmers, time management's ability of farmers, farmers-merchant transparency, and moral of farmers were boosted intangibly through mobile telephony for further improvements of crop production and productivity in Habado Kebele. The identified intangible benefit of mobile phone on education in Habado kebeles is that Mobile phone gives morale for the female students to attend school, and mobile phone enabled poor families to attend school. And also The identified intangible benefit of mobile phone on health in Habado kebele were that Collapse of inefficient traditional health service, Taking care of family from distant, and Mobile phone brought behavioral change to solve health condition. Based on the discussion and conclusion made the Habado kebeles communities should be encouraged to use mobile telephony for further improvements.

Keywords: Intangible, Mobile Telephony

1. Introduction

One of the main intangible benefits to derive from ICT is that of increased social cohesion, allowing social networks to vastly increase. ICT and mobile phones can additionally play an important role in disaster risk reduction and emergency situations, while also being an efficient means of providing health information and education. The wide ranging applications, touching on many aspects of life, can therefore act as catalysts for further change and development (ITU, 2011). Duncombe (2007) classifies the roles and benefits that ICT can bring into four categories:



Source: Duncombe (2007)

Type A is short-term that serves the immediate day-to-day needs, such as remittances from relatives, and enables participation in social networks. Type B is also short-term but more formally structured, such as government services or markets. Type C is long-term but informal, which can strengthen social capital. Examples are nonmarket-based institutions that favor the poor, and e-trading platforms that support fair trade. Type D is again long-term and formally controlled by organizations that seek to strengthen the other assets (human, financial, physical and natural) of the poor. For example this could include crop production, education health, micro-finance or training services.

Habado kebeles' communication landscape has undergone tremendous change since the introduction of mobile telephony. A core part of my investigation was to see intangible benefit of mobiles phone act as instrument of information dissemination. Thus, an assessment of intangible benefit of mobile-based information services targeting crop production, education and health were done as follows

1.1 General objective

The main objective for this study was targeted on Intangible Benefit of Mobile Telephony on Agrarian Rural community of North Shoa, Oromia Regional State, Ethiopia.

1.1.1 Objective of the study

The objective of the study was to

- To assess Intangible benefit of mobile telephony on crop production in Habado kebele
- To assess intangible benefit of mobile phone on education in Habado kebele
- To assess intangible benefit of mobile phone on rural households healthy in Habado kebele

2. Technique and methods of data collection

Number of data collection technique like key informant interview, personal observation and focus group discussion was used to gather relevant and appropriate information about the Intangible benefit of mobile telephony on agrarian rural community.

I Key informants

The key informant interview was conducted with Development agents, administrator of kebele elders to get real information about the problem. As it was one method of generating data to understand Intangible benefit of mobile telephony on agrarian rural community in the study areas, researcher communicated them smoothly to get expected data. Hence, inhabitants' experiences, opinions, needs, and constraints was collected and discussed with individual and group of interviewee. To make the communication easy and understandable, checklist prepared by English language was translated to Afan Oromo language as all interviewee have the same mother-tongue language (Afan Oromo) with me.

II Focus group discussion

The focus group discussion was held with the kebele elders that were selected randomly to collect the relevant data. This was to collect the data for the problem understudied from their brainstorming. To make the communication easy and understandable, checklist was prepared by English language and was translated to Afan Oromo language. Researcher was facilitating the discussion. In addition to the discussions, researcher was tried to attend formal meeting that headed by themselves and other government organ to understand the issue deeply. This all was done by announcing and taking permission from administrative office.

III Personal observation

Researcher collected available data by observing mobile telephony related situation. This was done by using guideline prepared to reduce confusion that might occur during the observation. Researcher also observed special event like the way they pray for their *Waqal/god/* to reduce the risk of different natural storm and so to increase efficient data on the problem.

3. Method of data analysis

Qualitative data gathered from Key informants, Focus group Discussion and personal Observation were compiled, organized, summarized, interpreted and narrated based on the concept of Intangible benefit of mobile telephony on agrarian rural community.

4. Data Analysis and Discussion

4.1 Intangible benefit of mobile phone on crop production

Mobiles can help farmers improve crop production productivity by giving them access to basic financial services, new agricultural techniques and new markets, in turn helping them to secure better prices for crops and a better return on investments. As their income improves with each harvest, they can invest in better seeds, fertilizer and chemicals. In contrast to above, there is uncountable intangible benefit of the mobile on agriculture in which few is discussed as follows.

4.1.1 Mobile telephone using to develop confidence to increase crop productivity

To understand intangible benefit of mobile on crop production researcher was interested to focus group discussion to exploit necessary information on crop production. Suddenly, in the group only one member was owned mobile phone. These groups were asked if mobile phone develops their confidence on crop production. They said *"Our Teff production has declined from one year to another for a reason unknown to us. We inquired at the governor who were closely working with us, but failed to get a satisfactory response from them. We, the community members, asked each other what went wrong on our Teff production. We finally concluded that let one with phone call to sire morose kebele where teff production was remain good. (Sire morose is about 50km away from Habado Kebele). The then, we informed that we have to change seed. Now everybody is using new seed so that we start to obtain good Teff production. So, for any kind of agricultural production we may face, we are very confident to solve the problem through our mobile"*. As of above information, some studies indicates that Farmers need localized news and information which meet their daily needs in their own language (Jain et al., 2014).

This indicates that mobile phone played great role to upgrade production as neighbor doing which is

impossible without mobile phone. So, experience obtained from sire morose kebele to capacitate the Habado kebeles' community through mobile phone is intangible benefit of mobile phone on crop production.

4.1.2. Gaining competitive advantage for crop production

A farmer can control its production through mobile phone to create new products that are in demand in the marketplace. Likely, researcher interviewed key informants, newly emerging rich of the kebele how he managed to be rich in the past 10 year.

He said" there was the production of same crop for same market without competing for restrictive title to it. This leads us to discourage more production in our community. The then I was thinking of how I can escape from this wrong doing. Finally, I reached that let my production is unique to control market. To do this mobile phone became my competitive weapons".

Some studies prove the above communities believe on the use of mobile telephony. If there is no proper communication between all stakeholders it creates the misunderstanding and frustration which affect the quality of work and reduce the business, performance of work and cause delays (Hargreaves Dean M.G. and Toni Robertson, 2009).

This indicates that the farmer is able to provide buyers with some unique product. There are many examples of products that would not exist without mobile phone. But it is the implementation of existing products through the use of mobile telephone that allows for competitive advantage. Therefore competitive advantage is intangible benefit of mobile phone.

4.1.3. More timely management information to enhance crop production

Mobile phone can deeply improve Farmers Information Services by providing timely information on land preparation, planting, weeding, irrigation, harvesting, storage and marketing, which are of chief disquiet to farmers. Treat time as a resource, then manage it and use it to enhance agricultural production is clear to clever farmers. FGD revealed that mobile phones were enabling same of Habado kebele farmers' to enhance crop production.

Focus group discussion also revealed as the business relationship between a farmers and a wholesaler is initially built on personal, face-to-face interaction. Once the relationship has been established, farmers and traders alike report that most of the communication between the two is conducted at a distance. This chiefly involves the exchange of information about supply and demand between the wholesaler in the commercial capital and the rural-based farmer. It is here that, for those who can access them, mobile phones hold the most benefit because they allow first-hand exchanges of information while it is still up-to date and can be acted on. Along with a better knowledge of demand and improved coordination of supply that mobile phones bring, traders report the advantage of having to spend less time and money on travel. Using mobile phones better enables farmers to keep track of consignments in transit and on their arrival at market. They also regard mobile phones as being a far more reliable and faster means of sending information than the previous method of using a messenger, a bus or the postal service to deliver a letter. However, many farmers is not using mobile phone in Habado kebele

4.1.4. Decision support systems for crop production

Households with better access to information, cash, rights to the means of production, tools and equipment, and the social networks to mobilize resources from outside the household, are less vulnerable to hazards, and may be in a position to avoid disaster. They are generally able to recover more quickly (prof.Rajan, 2015). Mobile phones have provided new approach to farmers to make tentative decisions much more easily than before. Use of mobile phones leads to greater social cohesion and improved social relationships among farmers. Likely, Focus group discussion revealed that Mobile phone can manage information and assist in strategic decision making that enable to develop a strategic approach to support decision to agricultural production. Also, key informant informed researcher as he connected with other farmer in far distance with mobile phone in collecting information to decide what to produce, when to produce and where to produce. Smiley, this key informants kissed his mobile and said "mobile phone is my power and hope for further production".

4.1.5. Moral support for cultivator to enhance crop production

Key informant said"10 years back, my family had faced severe food shortage especially in the summer. The income I used to get from wage labor occasionally did not enabling me to buy sufficient food for my children. Because, I have only half hectare of land around my home all, to feed eight member of my family. To feed my family I must go another far area to farm. The walking distance between my home and farm is about two-and half Day away. During agricultural operations I have to stay there. Before I owned mobile phone I was worry of my families and at the mid of farm operation sometimes I came back to my families and my crop production harmed. But recently I managed to have mobile and motivated to stay at my farm land up to end. Because I feel as if I'm in my house through this mobile telephone. So, my crop production is increased than before"

Some studies conformed that Mobile telephony could be one of helping solution to foster production (Awuor et al., 2013). This case indicates how far the mobile telephone gave moral support to poor farmers to enable them to produce more. Therefore moral support the farmer owned is intangible benefit of mobile phone that enhances crop production.

4.1.6. Enhance Transparency between farmers and merchant

The Mani Sunil (2011), indicate that mobile telecommunication contributes to equity by enabling the disadvantaged, including the poor, isolated rural people, and the disabled, to obtain information that would otherwise be very difficult or impossible to access to real information from the whole seller. Likely, in making fun, focus group discussion revealed that *“Gone are the days when we would aggrieve if our products would fetch the right price that reflected our hard work, time and cost invested, from plantation to harvesting. We were always constantly manipulated by the wholesalers who possessed both information and purchasing power and we had to rely on the fake information about the prices of our vegetables Before we (at least our neighbor) get mobile phone”*. They said *“giving fake information became history as we managed to collect information from elsewhere including Markato (big market in Ethiopia). Merchants themselves are not confident to lay us”* so, mobile phone create strong bond between merchants and farmers in deciding price of the products.

4.1.7. Farmers built confident to control crop diseases

From focus group discussion, Researcher came to understand that small farmers prioritized weather, plant protection (disease/pest control), seed information and market prices as the most important. Mobile telephony is an efficient substitute for conventional information delivery mechanisms to meet farmers' information needs; researcher study clearly underlines the hidden potential of mobile-based agricultural information services like market prices, weather information, information on diseases/plant protection, pesticides and seed information as their top needs. In some cases, farmers had access to agricultural extension workers who would visit farmers in the field, but this was not consistently true. It was also noted that often, the expertise needed to diagnose plant disease was not available locally and there were no clear channels to tap into broader regional or national experts.

4.2 Intangible benefit of mobile phone on educations

4.2.1. Mobile phone gives morale for the female students to attend school

On the way to Habado kebele, Researcher met a group of farmers who had no electricity in their homes, but had a phone. These groups of farmers said that *“our girl children were taken to marry by force on the way to go to school. So, having mobile reduced these jeopardize. Mobile phone communication helps a lot; sometimes our girl child can to spend nights in the roads and all this jeopardize our Childs security especially if they are alone. So we usually call and make sure that the road is accessible. Relatives or friends, who know that our girls are on the same road, will call us and notify that the road is dirty. This helps us a lot, we can now control roads security situation”*. Giving moral for female students is intangible benefit of mobile on the education.

4.2.2. Mobile phone enabled poor families to attend school in Habado kebele

One female key informant was inhabitant of Habado kebele who was responsible for two important tasks. Firstly, she must carry out all domestic work at home, such as cooking, cleaning and taking care of her children. Secondly, she must work in wage laborer in order to generate income that enables her to purchase grain and other basic needs. She has no livestock. This key informant explained her living situation: *“I like very much to work and people who seek wage laborer in our community phoning me to give me an opportunity without any hesitation. I do not want to waste my time in sitting. Three of my children are attending school, and I shall try to do all what is possible not to pull them out of their studies. Having five children and being poor means getting a new husband that fits to one's situation would be somehow difficult”*. This meant that this key informant accessed to work through mobile phone in which she managed to fetch income for her children. In this case mobile phone gave intangible benefit key informant's children to enable them to attend the school.

4.2.3. To own mobile phone, Habado kebele communities encouraged to learn

Focus group discussion revealed that the mobile phone is considered as a tool of prestige, and also as something with much practical value. But because it is expensive to run, you sometimes find people with cell phones who go for months without making a single call. However they are proud of their phones and usually they want to display it for people to notice that they have a cell phone. People hardly respect notices and instructions telling them to put off their cell phones on special occasion. To them, it is like being asked to switch off one's ambitions for prestige and social status. To end this mobile owner should learn to manipulate through which education is encourage that community. Enhanced education in search of being prestige and literate is intangible benefit of mobile phone in Habado kebele.

4.3. Intangible benefit of mobile phone on the Health

4.3.1. Collapse of inefficient traditional health service

Before coming of mobile, People of habado kebele would prefer to treat each other through traditional practices of different types: kadhana(prayer) for the sick individual, visiting Atete (wizard), applying different types of herb to be provided by special community healers, and sometimes burning part of a patient's body (face, stomach, back, etc.). They come to the health post only when these practices fail, and by the time the patient is exhausted and is in a critical condition. Recently, they able to contact healthy extension for first aid and then to next health center as required than before. This happened mostly by order of their relative from urban areas through phone. So, many

lives are rescued through mobile phone which is intangible benefit of mobile to health in rural areas.

4.3.2. Taking care of family from distant

Some key informant said “*Where I am working and make my farming activities is far away from where my family lives. Through the use of my mobile phone, I can easily communicate with my family, knowing their problems, advice and finding solutions before the matter has gone bad. Sometimes when a child is sick, I’m calling them and tell them to go to hospital and I am sending money for covering the expenses through another person.*” Taking care of family from far distant is intangible benefit of mobile phone to health.

4.3.3. Mobile phone brought behavioral change to solve healthy condition

Key informant said “*My sister did not have an experience like that before in her life and when the accident occurred to her daughter and she got injured, my sister did not know what to do, she could not act alone, she called me and I helped her. So the mobile was very useful in that situation, she called me and found me at once*”. Prior to the mobile phone, the respondent’s sister would have had to tend to her daughter’s injury on her own. In this situation she is able to consult with someone she knows that can provide the information and guidance she needs to manage her daughter’s condition. This is another intangible benefit of mobile phone in solving health problem in the Habado kebele.

5. Conclusion and Recommendation

5.1 Conclusion

Based on the above discussion the following concepts were concluded. Likely the objective of the discussion, identified intangible benefit of mobile phone on agriculture is Mobile phone using develops confidence to increase agricultural productivity, gaining competitive advantage to agricultural production, decision support system for agricultural production, More timely management information to enhance agricultural production, enhance transparency between farmers and merchants, Moral support for cultivator to enhance agricultural production and Farmers built confident to control agricultural diseases.

The identified intangible benefit of mobile phone on education in Habado kebeles is that Mobile phone gives morale for the female students to attend school, mobile phone enabled poor families to attend school, and Mobile phone owner seen as prestige and literate.

The identified intangible benefit of mobile phone on healthy in Habado kebele was that Collapse of traditional healthy service, Taking care of family from distant, and Mobile phone brought behavioral change to solve healthy condition.

5.2. Recommendation

Based on the discussion and conclusion made the Habado kebeles communities should be encouraged to use mobile telephony.

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