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## Participation and appropriation of ICT in women from rural áreas in flows of information. The tablets of Cuna Más Program, Peru

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# **Participation and appropriation of ICT in women from rural areas in flows of information. The tablets of Cuna Más Program, Peru.**

Lic. María Fernanda Vivanco Salazar<sup>1</sup>

## **Summary**

This investigation explores the reaches of the use of Information and Communication Technologies (ICT) by professional women in rural areas in Peru. These women are facilitators in a national program focused in children's development: The Cuna Más National Program, program which has developed in a framework of processes of modernization of public administration (e-administration, e-government). Theoretically, we differentiate technological "use" and technological "appropriation" while the difference implies the attribution of a series of valuations (of sense and objectives). In order to lay out that the hypothesis that suggest that technological implementation not develops a cultural change at a institutional level, we have to consider that these women could develop their own appreciation of the objectives and they did not have an effective participation in the electronic information system, even though the time where they were developing a quantity of domestication strategies of technology to benefit of them in their daily use. This investigation was based, most of it, on qualitative methodology, by the application of interviews and observation of two Territorial Units of the program (Cusco and La Merced) where Cuna Más Program is given in rural areas, in order to know the experience and perceptions of operators who use tablets (technical companion) to fill and electronic form that monitors the security of the location where children (users) between 6 and 36 months attends. This information is sent to national technological system CunaNet. The results of this investigation allows us to think about the internal and external limits of a public program, limits that surge in the framework of the use of ICT and in the viability of technological implementation as a asset itself and not for their results on the short and long term.

## **1. Introduction**

This research presents a case of Information and Communication Technologies (ICT) implementation in the framework of modernization of management processes in the public sector, also known as e-administration and e-government (Chung, et.al. 2011, Lee 2010, Hodos 2014); concepts that refers to a relationship between government and citizenship, and that can also be applied at the interior of the relationship between operators of public administration, for the modernization of their bureaucratic processes with the "de-materialization" of the information at the moment to enter it to systems of electronic information, systems which guarantee the reduction of time in management and therefore more efficient results.

In accordance with this modernization process, on 2011 in Peru, it was approved, through executive order N° 066-2011-PCM, the Plan for Development of the Information Society in Peru: the peruvian digital agenda 2.0, which vision is a peruvian society that "has transformed in to a society of information and knowledge, active and productive. This society is integrated, democratic, open, inclusive and shares equal opportunities to all".<sup>2</sup> Within the plan there are considered necessary factors to the accomplishment of this vision like the one that sustains to have political leadership that can articulate all involved sectors of the State in all its levels (local, regional and national), and adequate allocation of resources, definition of the institutional

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<sup>2</sup> "Plan for Development of the Information Society in Peru: the peruvian digital agenda 2." Page 21. Available in: [http://www.codesi.gob.pe/docs/AgendaDigital20\\_28octubre\\_2011.pdf](http://www.codesi.gob.pe/docs/AgendaDigital20_28octubre_2011.pdf) (Date of reference 25/05/15)

approach which can allow the development of a public policy and a model of efficient management, as well as the commitment and appropriation of all public, private, civil society and academia organizations.

In the last E-Government Development Index (EDGI – 2014) Perú reached an index of 0.54 (High EDGI), above the worldwide average (0.47), in position 72 from 184 countries in total.<sup>3</sup> Countries with high EDGI are characterized for having “clear strategies, smart investment in ICT infrastructure, continued investment in primary, secondary and tertiary education, as well as through radical transformation in offering online public services, governments can achieve more to follow the upward trend”.<sup>4</sup>

In this context there are cases like Cuna Más Program. This program has implemented the use of tablets to fill an electronic index card which reports information to a electronic system. The national program “Cuna Más” is on charge of the Ministry of Development and Social Inclusion (MIDIS) and have been implemented since 2012. This program has as an objective to “improve child development of boys and girls under 3 years old in areas of poverty and extreme poverty, in order to surpass the gap in cognitive, social, physical and emotional development”<sup>5</sup> with integral attention in centers of diurnal care since morning to afternoon. The implementation of Information and Communication Technologies (ICT) can be noticed by the use of tablets where they can fill an electronic questionnaire that weekly supervises the security of the infrastructure of the places where the children are attended, the safety measures that protects women who offers the service of the care (“care-ers”) and everything about the children (presence of physical and emotional irregularity). All this enformation is sent to the head office, located in Lima (capital from Peru). The head office systematize the data and generates monthly reports. With the ICT we can evaluate the success of the goals of the program at national range; that is why it is important for the taking decisions part and the adjustment of goals.

The proposal of the use of ICT in this program is indirectly aligned with one of the strategies of the National Digital Agenda inside the objective of guarantee “better opportunities of use and appropriation of ICT that assure social inclusion, access to social services that can allow full exercise of citizenship and human development in full compliance with the goals of the millennium (objective 3)”, by means of the stimulus of a management of health that connect better with the public health centers, in addition to implement clinical histories in order to count with clinical information essential for the attention of health in a country with a very vast and uneven geography. That is to say that, even when the Cuna Más Program is not a health center, instead a care center for the minor that promotes nutrition, health and early stimulation, when the questionnaire gets into the tablet, that allows to have and record per child, establishment and carer.

It is because of this particular case of collection of information by means of and specific digital device (tablets) that we ask ourselves, how is the own/auto perception of the persons who uses the tablets, how much they “appropriate” symbolically of the objectives and utility, and finally, what is the kind of participation that they have in the flow of information. Therefore it results vital to understand the difference between access to ICT, the use of them, the “appropriation” whereas acquires a special sense for whom they use them (Barreto, García y Hernández, 2013, Neil Selwyn 2010) in the framework of the implementation of ICT that are used in rural areas and that require different types of domestication, technological, social and economical, (Bustamante, Burneo y Alvarado 2009), being this kind of domestication the strategies that develop the operators of the tablets to approach the objectives associated to their job.

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<sup>3</sup> Peru went 10 positions up in the survey from 2012, it was in position 72. Source: [http://unpan3.un.org/egovkb/Portals/egovkb/Documents/un/2014-Survey/E-Gov\\_Complete\\_Survey-2014.pdf](http://unpan3.un.org/egovkb/Portals/egovkb/Documents/un/2014-Survey/E-Gov_Complete_Survey-2014.pdf)

<sup>4</sup> United Nations. E-Government Survey 2014. New York, 2014. Source: [http://unpan3.un.org/egovkb/Portals/egovkb/Documents/un/2014-Survey/E-Gov\\_Complete\\_Survey-2014.pdf](http://unpan3.un.org/egovkb/Portals/egovkb/Documents/un/2014-Survey/E-Gov_Complete_Survey-2014.pdf) (Date of reference: 20/05/15)

<sup>5</sup> Available in Official Website of National Program Cuna Más. [http://www.cunamas.gob.pe/?page\\_id=12](http://www.cunamas.gob.pe/?page_id=12) (Date of reference: 28/09/14)

On the other hand, being this investigation one about women in rural areas, the gender variable is explored in this investigation around the way how is lay out the management of the ICT in function to the role that is expected to accomplish as “technical companion”. Argument which is not oriented to promote the development of their capacities and liberties, argument that re – affirms the expectation that it develops around them, the expectation of a “gendered job” (Dorothea 2014) tied to child care (bound to a maternal role), inclusively when this workers are women with superior or technical studies that can permit them to do other different tasks. Therefore, the appropriation of the women who use tablets depends in a great measure of the variable age and how this variable has enabled a previous connection or not to the use of ICT.

Finally we explore how in the insertion of these kind of ICT adjusts to the form that is set out public administration in Peru, characterized of un - concluded processes of decentralization (Haldenwang 2010, Melendez 2012), that defines the effectiveness of the participation of all actors at the interior of an electronic system, observing a series of barriers for those who are far from their social and political center, Lima, the capital.

For the development of this investigation it has been used qualitative methodology, applying tools like document revision, interviews and; participant and non-participant observation in two territorial units of the program (Chanchamayo and Cusco) and in the head office (Lima). Furthermore, the technical companion of the Cuna Más Program, actor that operates with the digital device (Tablet) to fill the electronic questionnaire and who characterized for being a professional women between 25 and 55 years old (by selection of the program), has been defined as the unity of analysis for this investigation.

The organization of the chapters consist in a first bibliographic review about the digital context in Latin America at the interior of the information society, the use of ICT to the generation of electronic governments, furthermore the presentation of the concepts of use and “appropriation” since the perspective of the users. In second place, we present you the approaches of this investigation, the case selection, the formulated questions and the methodology to answer them. In third place, the analysis of the case of the Tablet from the Cuna Más Program specifying the technological context –proper of rural areas- to know how much have been developing strategies of domestication by the tablet operators, and experiencias that define use, appropriation of this ICT to finally land in a reflection about their thoughts of their participation in the electronic information system.

## **2. Theoretical Framework**

### **2.1. ICT in public administration**

The growing development of information and communication technologies have generated an interest to implement them by the governments in their administrative processes. Then so, the electronic administration or e-administration allows for one hand the efficiency of the internal operations of the public institutions, reducing the bureaucratization (de – materialization of documentation), electronic file of data base, emission and reception of information in a shorter period of time and lower costs; and, on the other hand the computerization of the relationship between citizen and public entities, by the guarantee of the State to the final users the services offered electronically (Hodos 2014).

An improvement in the public administration goes tied with an improvement in governance. In the case of “electronic governments” or e-government, in addition of the use of technology and processing information to reduce costs, as with e-administration; it forms part of the objective give transparent information to citizenship. But the fact that of the access to information does not guarantees the diffuse of the information in an equitable way; therefore it is important to recognize and expand the notion with the e-democracy, where there is recognition to the access to information as well as the recognition in participation in political processes and decisions.

Now the concept is not only one-way, now there can be perceive a more active role from the users (Chung, et.al. 2011). In other words, the access to information about the processes of the government does not guarantee the participation of users.

«In the global phenomenon of e-government, developed countries that have strong financial and technological resources actually play a leading role. [...] However the succesful practices of this nations in e-government or e-democracy are not just based on their advanced technology and stable economy, but are likely to be a result of their political and civic fundamental norms—democracy, transparency and freedom» (Lee 2010: 447).

It is important to enclose that the concepts of e-government and e-democracy refer to a relationship government-citizenship. That is why we ask ourselves how does it occurs participation, as a guarantee of a democratic practice, at the interior of the participants of a flow of information, al the interior of a electronic administration and what are the criteria or principles that rules the “electronic government”.

Finally, when we talk about information we refer primarily to information systems where actors and entities interact in flows to enhance a common objective. In the case of the information systems inside the public administration, and in a more specific spectrum, oriented to health matters to Yeimi Orduña (2014) they must be based in real necessities of people for their relevance in the implementation of public policies; but to be competent they need to be accompanied by a adequate culture that can explain how does it used and treats the information, that is the way people will be able to be part of the planning, verification, control and take better decisions. In this context, the inclusion of ICT generates expectation on the generation of knowledge capable to consolidate public health.

### ***Unfinished decentralization processes and their effects in the Peruvian information flows***

In the last two decades, there has been developing some changes in Peru, a group of changes that can transfer a series of faculties (mostly economics) and the political recognition of governments sub – nationals as a part of a “decentralize reform”. This changes invigorate the local politics, which are not part of a planned project because there has been disjointed initiatives. They are measures given “from the top” that gather the expectations and local demands, but does not transform them in effective measures of the government.

With the objeotive to heal the institutional weakness of the State translated in just a limited territorial presence that limits the political processes that take place in our country. Carlos Melendez (2012) describes an scenary where the power is concentrated in a center, with ranks o authority that extendes as we reach the interior of the country. It is a challenge for governments the power to create a political systema capable to control the territory beyond the capital and urban centers.<sup>6</sup>

Recently in a study about fiscal decentralization in Peru of C. Von Haldenwang (2010), since the adoption of the system SAT in municipalities, as part of the incorporation of criteria of the New Public Management<sup>7</sup>, it founds that this measures that pretended to contribute to the procese of decentralization finished being part of isolated processes of individual instiuttions: “the approach tends to create islands of modernity in a sea of backwardness” (2010: 663). This type of innovations, noted, could be useful in a public sector that was uniformed well equiped where the successful innovations could expand between other instiuttions, situation that is

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<sup>6</sup> The institutional reforms implied political recognition of the local towns by changes in the political constitution of 1979, the generation of DL 776 which promote the distribution of the Compensation Fund of the town – FONCOMUN- with benefits to local towns and areas with more poverty, and with the creation of the mecanisms of participation (participatory budgets) to render accounts.

<sup>7</sup> Consists in the introduction of management based in results by tools applied in private sector for the achievement of concrete objectives.

contrary to developing countries where there is a limited equipment and a weak public sector where the innovations like administrative seem to not be sustainable.

The ICT have been seen, in a lot of occasions, as struggle flags for much governments, conceived wrongly, when actually are tools that transmit the idea that can improve the efficiency and effectiveness of public services in order to approach development. One of the mistakes of seeing them as the final purpose is that it's fast evolution difficults the proposal of their objectives. In a context where the acceleration has the force of digital exchange, the transmissions go in real time, being communication forms of multidirectional nature; this way permits information circles point to point. Examples, mails, video conference.

## **2.2. Use, appropriation of ICT and gender**

Actually the diffusion of digital device (cellphones, computers, tablets, etc.) is characterized for being a simple process of great speed. Each time is more simple to acquire a device of mobile telephony in different markets or by using other ICT, the same with internet transactions. Complementary, these devices require access to connections (conduit access) to supply of cable, electricity and internet so they can be used and acquire sense in social relationships. As mentioned before, it is not sufficient acquiring and device because first you must learn how to use it. The technological knowledge diffuses by collective experience and economical structures; that is because the producers and users are inserted in certain networks and social relationships that has more or less touch with ICT and attributing a meaning. (CEPAL, 31)

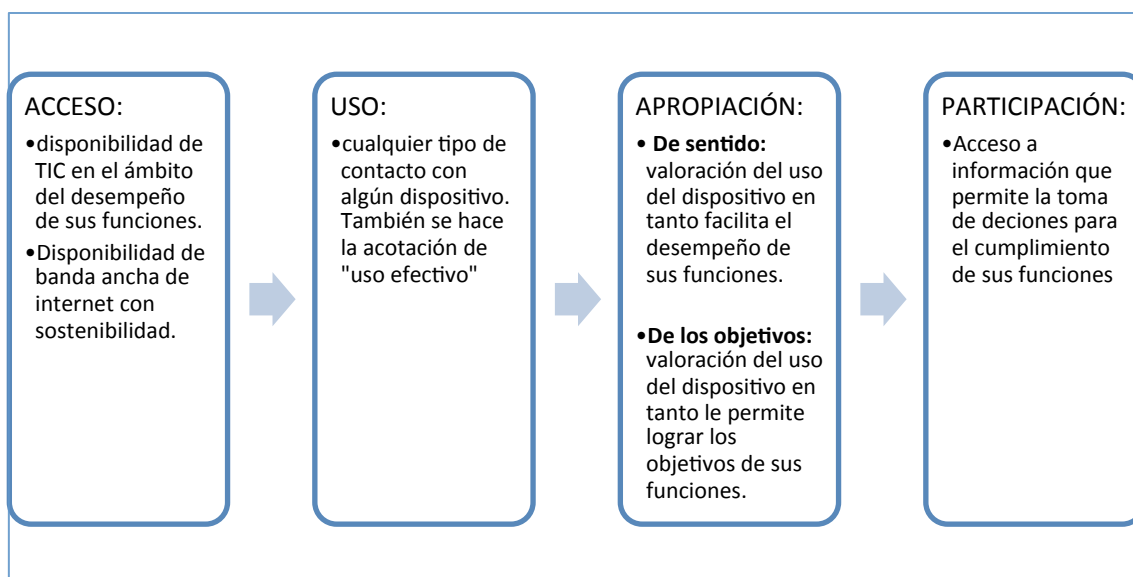
For the Californian professor in education and computer sciences Mark Warschauer, there are other variables that should be considered to affirm that an individual can make effective use of a device; variables such as the type of bandwidth of internet, the autonomy to connect to internet (there are people that only can enter to internet at work and not at home), the abilities of the user to obtain information or if the individual count with the social support to obtain it and, finally, the type of purpose because it's being used, it could be for entertainment, increase networks and social capital; or productive purposes. (Warschauer, 2004)

We can say that the power to have the capacity to use ICT goes beyond the classic definitions of the capacity of the individuals to read and comprehend what they read, it also depends of acquisition/development of a series of abilities or multi – literacy such as “information literate”, “adaptively literate” and abilities since the use; and apply these abilities in business or in professional and domestic matters (2000 Andy Carvin). It does not just insert the new (ICT) in the old; that is the environments (work, social, etc.) in which a electronic device inserts and an electronic system which is available for the insertion.

Entre el uso y la apropiación de las TIC existe un continuum que consideramos resulta vital para entender como intervienen los factores antes mencionados, siendo la apropiación “un proceso material y simbólico de dotación de sentido respecto de un determinado artefacto cultural por parte de un grupo social, enfatizando la capacidad de los sujetos para volverlo significativo de acuerdo con sus propósitos” (Benitez Larghui et al., 2012, en Barreto, García y Hernandez, 2013).

To explain the continuum we based in Neil Selwyn's studies (2010) about the use of ICT and the appropriation of these in the framework of the development of superior education, study that can apply to different technological contexts. In order to achieve that, we re – orient these meanings to the use of digital devices in the context of public administration and health, creating two types of level of “appropriation” and adding in to it the phase of participation as a important stage that in the logic of e-democracy, allows to conceive the inclusion of all users of the system of information in the access of information and its use for the making decisions according to the objectives of the individual role.

**Graph n. ° 1: Continuum acceso- participación mediante TIC al interior de procesos de e-administration**



*Elaborated by the author*

In respect to the gender variable it is outstanding to note that we not use it to measure the access to ICT because the nature of the use of digital devices in the work environment supposes its guaranteed access; nevertheless, this variable acquires another meaning when we refer to the appropriation that the actors can have and in this case women use these devices. The studies of Dorothea Klein (2014) about the use of computers by women in cybercafe and “infocentros”<sup>8</sup> points out that exist social norms which define the access and use of the ICT, such as gender norms related to time and space. In these way, she described a scene where women, depending if they where or not in a cybercafe (spaces characterized by a logic of individual use with separate compartments) could feel discouraged of making questions about the use of computers in contrast to the environment of “community” offered by the spaces as the “infocentros” where assisted primarily women. As well as the characteristics that these spaces asumed depending the hour and day of the week, where there was participation of different social groups (children, teenagers, adult men, housekeepers, etc.)

The relevance of the conditions of space and time in a rural and patriarchal context result in demarcation of the experience of the users and in the possibility of appropriate the ICT and/or expand their capacities (Barreto, García y Hernández, 2013). These assumptions that refers to the domestic sphere and the public sphere, can be also applied to the work sphere, which stablishes their own rules of use, defined by the role and tasks that must accomplished their worker women.

### **3. Approaches of the investigation**

Below we present the main methodological bases of this investigation: Selection of study case, objectives and the methodology of collection of information.

#### ***The Cuna Más National Program (CMNP)***

It has been selected as a study case the Cuna Más National Program for beeing a program that has implemented the use of digital devices –tablets- as a tool for the collection of the data of a group of professional women with the purpose to insert the data to a national system of information.

Having as a precedent the National Program Wawa Wasi (NPWW) in 1993, in 2012 receives the name of National Cuna Más Program (CMNP) and is assigned to the Ministry of

<sup>8</sup> Servicios brindados por el gobierno chileno donde se facilitaba el acceso a computadoras y cursos de informática gratuitos en instalaciones similares a bibliotecas.

Development and Social Inclusion (MIDIS) by executive decree n.º 003-2012-Midis, having as its principle objective to improve child development of the user kids between 6 and 36 months, in a situation of poverty and extreme poverty with the purpose to surpass the gap in cognitive, social, physical and emotional development. One of the services that offers CMNP is diurnal care (furthermore, “service”). This service, actually has an approximate coverage of 54 thousand of user child, the CMNP gives attention en their basic need in health, nutrition, security, protection, affection, game, knowledge and development of abilities.

The service is present in 323 distritcts, organized in 36 Territorial Units in a national range (ver anexo n.º 2). Territorial Units are spread at national level but are monitored from the head office, located in Lima. Each territorial unit counts with a technical team of coordinators, specialists, former, technical companion, educators and assistant to the implementation of the services of the program.

Cuna Más operates under the modality of joint management between the State and the community with the pupose oh sharing the management, the provision of the service and surveillance of the attention of the users. The participation of the community is the result of the creation of Management Commitees. The management commitees are formed by a governing board which directly coordinates with the Territorial Unit (TU), with kitchen associates that are in charge of the food preparation, carers that have the responsability to give integral attention to the user child in the service and, finally, guide mother that make home visits to the user’s family and/or replace de carers in case of absense.

The linker is, principally, the technical companion. That is because she has in her functions to make visits to stablishments to supervise the atention that are giving the carers to the children, train them, communicate activities to the TU and collect information in a tablet about the security of the stablishments and of the children. Below we can see an scheme of the operation of the service of the diurnal care and its members:

**Graph n.º 1: Principal actors of Cuna Más Program**

<b>TERRITORIAL UNITY</b>	<b>MANAGEMENT COMMITEE</b>
<b>Coordinator (Coordinador)</b> <b>Educational trainer (Formadora )</b> <b>Especialists</b> <b>Technical companion (acompañante técnica)</b>	<b>Director board (Junta directiva)</b> <b>Cooking partner (Socios de cocina)</b> <b>Mother guide (Madres guías)</b> <b>Care-ers (Cuidadoras)</b>

*Fuente: Lineamientos técnicos del Servicio de Cuidado Diurno.*

*Elaborated by the author.*

The technical companions are the chosen actors for the collect of information in a *tablet* of Security and Infraestructure matters. This process occurs when they make the visits to the stablishment of service to user child; information sent weekly to the head office, located in Lima.

#### ***Description of the tablets and the Card of Security and Infraestructure***

The CMNP has a series of tools to monitor the advance of the children, the promotion of care practices from parents to child, among others, all of them with a physical character. The unique electronic card of the Service is the Card of “Security and Infraestructure”. This card has the purpose to evaluate weekly the security of the service in three aspects, i) the infraestructure of the stablishments (identify if there is a risk situation for the children), ii) the carers (documentation, hygiene, surveillance to the kids) and iii) the user kids (documentation, sign of physical and/or pysical maltreatment)



The electronic card replaced the physic card that was filled by the technical companions before. In the pressence of some accidents associated to user child of the service, eventhough some of them did not had direct relationship with the program, in 2013 it was considered the importance of the verification of the security of the stablishments. The head office points out that the option of the use of tablets (provide to technical companions to fill the cards) reduce the time of the transfer of information and it was chosen because of the light weight, the resistance and the easy handling.

With this technology it should allow that directly in the tablet and this tablet online communicates with the servers of the data base of the systema. So that has a lot of advantages, isn't it? First it eliminates double fingering, one in the physic and other in the system, allowing to eliminate fingering errors, of inconsistency, so only it would be entered one time and that saves in the data base. That Is a great advantage, well, saves time, work, double resource, isn't it? As on the TC and computer technician fingering double time. (NAC.ENT.INF.1)

These *tablets* are model AOC of 9 inches with a capacity of storage of 1GB. In the market they have a approximately cost of 800 soles. In the head office of the program the allocated cost of the adquisition of *tablets* was of 1500 soles per each one, according to the interviews done.

The card of Security and Infraestructure was modified three times with the purpose to reduce the number of questions to 23 and adequate them to an electronic format to be inserted in the tablet<sup>9</sup>. The contents of the cards starts with a general description of the hour and place where the register is being maked, followed for the next four (04) listing:

**Tabla n. ° 1: Main content of the tab "Security and Infraestructure" Cuna Más National Program**

<b>DATOS GENERALES</b> <ul style="list-style-type: none"> <li>• Date, time of time of survey</li> <li>• Location of the local daytime caregiver</li> <li>• Number of children attending</li> <li>• Number of children absent</li> </ul>	<b>CENTRE INFRAESTRUCTURE</b> <ul style="list-style-type: none"> <li>• If the children's center has some type of internal risk (damage to infrastructure)</li> <li>• If the children's center has some type of external risk (close to transit routes, wells location, etc.)</li> <li>• If the children's center features medicines and hygiene regulations.</li> </ul>
<b>CARE-ERS SECURITY</b> <ul style="list-style-type: none"> <li>• General information (name, surname, room care)</li> <li>• If care-ers have children assigned ratio</li> <li>• If denotes inadequate personal hygiene</li> <li>• Possession of a certificate of physical and psychological health effect</li> <li>• If care-ers have seen an abused children</li> <li>• If care-ers have received a labor induction</li> <li>• If care-ers think they are bringing an integral Care</li> </ul>	<b>CHILDREN SECCURITY</b> <ul style="list-style-type: none"> <li>• If the children have documents (insurance, record of growth, identification)</li> <li>• If the children have signs of disease</li> <li>• If the children shown withdrawn or aggressive</li> <li>• If the children children denotes a poor personal hygiene</li> <li>• If the children have a chronic mental illness or</li> </ul>

*Fuente: Ficha de Seguridad e Infraestructura del PNCM.*

The register of information is carry out by the technical companion whom sends information to the head office of the program. The profile of the TC is basically one of a person with some superior study, originating from the province where is located the TU or a adjacent area. Their ages vary between 25 and 55 years old approximately, characteristic that influence in their

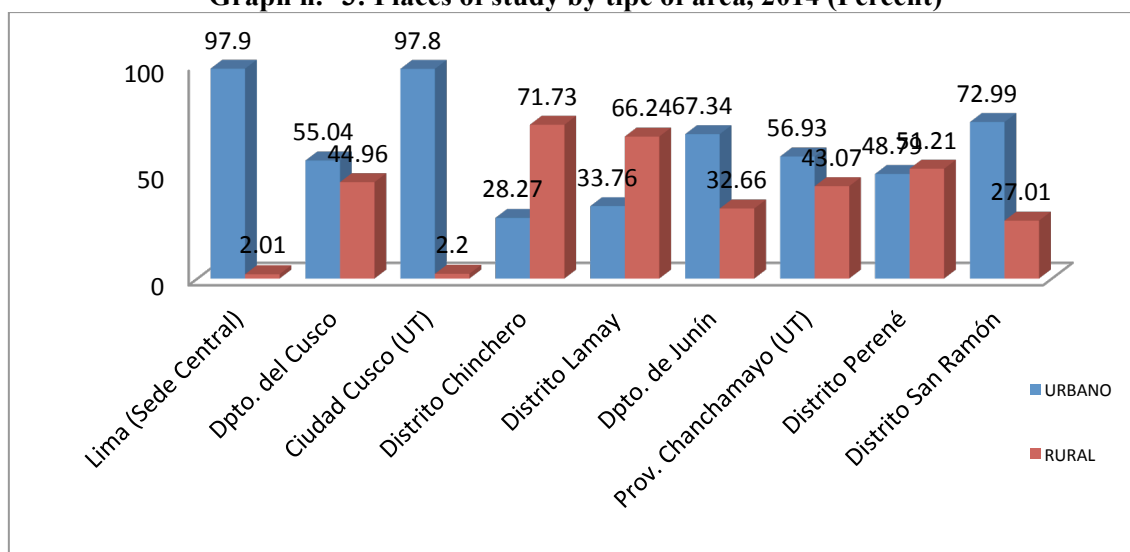
<sup>9</sup> El detalle de la Ficha de Seguridad e Infraestructura se encuentra en el anexo n.º04

previous approach to ICT in general and the manipulation and the use that they give to the *tablets* of the program.

With the implementation of the ICT as a tool to supply a system of information we have interest on two matters, on one hand to know the implications of the use of the tablets and the fill in of the card by the TC, and on the other hand, the effective participation that they have at the interior of the system which they provide.

For purposes of the investigation there has been selected two (02) Territorial Units (TU), the TU of Cusco, located in the province and department of Cusco; and in the TU of La merced, located in the capital of the province of Chanchamayo, department of Junín. We picked these cases because the establishment of service where located in districts where the population where predominant rural, as it can see in graphic n.º3. That's the case of the districts of Lamay (Province of Calca) and Chinchero (province of Urubamba), in the case of Cusco; and of Perené and San Ramón, in the case of La Merced, where there has been done our main fieldwork observation.

**Graph n. º3: Places of study by tipe of area, 2014 (Percent)**

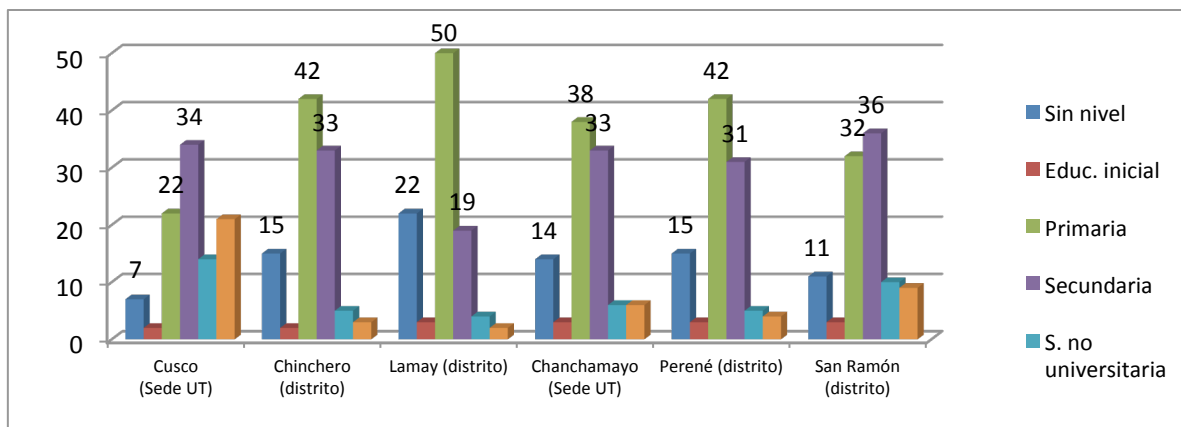


*Fuente: Instituto Nacional de Estadística e Informática. Censo Nacional de Vivienda y Población 2007*

*Elaborated by the author*

Además, son ámbitos rurales que también se caracterizan por tener bajos niveles educativos en donde se esperaría que la “literacidad” del entorno influya sobre el tipo de cultura que se tiene sobre la domesticación social para el manejo de TIC. Siendo los últimos niveles educativos (ver Graph n. º 4) alcanzados por la población los niveles primario y secundario, llegando —en el caso del nivel educativo primario- a superar el 30% de la población de los distritos de los locales de servicio visitados (Chinchero, Lamay, Perené y San Ramón).

**Graph n. º 4: Places of study by people's last education level (Percent)**



*Fuente: Instituto Nacional de Estadística e Informática. Censo Nacional de Vivienda y Población 2007*

*Elaborated by the author*

To be more precise our unity of observation is the TU, the unity of analysis are the technical companion of the Diurnal Care Service of CMNP whom uses tablets to collect information and makes visits to stablishments in rural areas. Even though when these women where characterized for being women with professional studies we consider that the social environment (type of área and educational level) and the technological reosurces (Access to internet) influence in the form of how they experiment the uso of ICT design for the program.

### Investigation Questions

This investigation had the purpose to know what kind of appropriation had the users of the ICT formulated by the CMNP (tablets) considering, on one hand, the context of e-government and the rural areas in which get along the use of digital devices and, on the other hand, the type of work that these women must do. Therefore, we ask ourselves:

1) in what way the technical companions of CMNP appropriates of the objectives for it was designed the electronic card of the tablet? And, what expectations has generated and what abilities have been developed by these women since the use os ICT?; and 2) which is the technical companion participation in the flow of information of the program?

As an hypothesis we propose that the form of appropriation of ICT who has the technical companion consist on focus on the symbolic value that has the digital device. A digital device that denotes “modernization” in the public administration, and not neccesarily used by the technical companions to obtain information for their labor performance. Even more, the posibilidad that the use of tablets permits expand their capacities is limited, not for the technology, instead because the tehcnical companion functions can be considered as a «gendered job» and also for a series of norms that does not guaratees the autonomy in the access to information even thought the device emerge the physical work space.

### Investigation Methodology

The collect and analysis of information was done on two levels, national and study cases<sup>10</sup>, using qualitative methodology. At national level, it was compound of i) documentary review, ii) application of semi – structured interviews to employees of the head office and data base of the system CunaNet.

<sup>10</sup> The case study allows exploring an entity or phenomenon during defined time and activity, and collect detailed information through the use of various harvesting techniques. Research Design Qualitative & Quantitative Approaches. Thousand Oaks: SAGE, Creswell J.W. (1994).

The two (02) study cases were selected with the criteria described in Annex n.º1 These cases, presented in Table n.º3, allowed to go in depth with the analysis of the proposed objectives in this investigation.

**Tabla n.º 1: Casos seleccionados para el Examen de Desempeño**

Region	Territorial Unit	Province	District	Management Committee
Cusco	Cusco	Cusco	Lamay	Asociación de tejedoras Santa Rosa de Lamay
			Chinchero	Virgen de Natividad
Junín	La Merced	Chanchamayo	Perené	Sangani
			San Ramón	San Ramoncito neonato

*Fuente: Base de datos del Sistema CunaNet*

*Elaborated by the author.*

At the level of study cases, during the fieldwork (january-february 2015) it was used collected information with qualitative instruments: i) documentary review, ii) structured interviews, iii) non participant observation, iv) participant observation.<sup>11</sup>

There had been done a total of 22 interviews, distributed like this: 11 interviews in Cusco (3 specialists and 8 technical companion) and 9 interviews in La Merced (4 specialists and 5 technical companion) and 2 interviews at head office (as well as informal conversations). At last there had been done two types of observation, participant and non participant in the stablishments of TU of Cusco and La Merced. The detail of the distribution of the interview and observations can be found in Annex n.º01. The participant observation allowed us to know how the perspective of the TC in the matter of the procedure of the fill in of the card step by step, and the non participant observation allowed us to see the issues during the fill in.

#### **4. Analysis of the Information**

##### **4.1. The implementation of tablets in the National Cuna Más Program**

The implementation of these digital devices and the way that operators can appropriate of them is defined by technological context. This is the context where there were inserted the ICT and the form how the training has given for its use.

To understand the context of the use of tablets by TC it is important to know the actual situation at a national level about the use of ICT in general terms.

For 2014, from all the ICT in Peru, mobile telephony was the more diffused with a 86%, of 100 houses in Peru, 31 had a computer (INEI, 2014).<sup>12</sup> In spite this not discouraging figure it is important to note that not all computers count with internet, noting these difference more remarkable between urban and rural areas; these disadvantage can be seen in the next table.

**Table n.º 2. Peru: Percentage of households with computer and Internet access, by area of residence (IV-Trim 2013 and 2014.)**

<sup>11</sup> La observación va a consistir en dos fases. Una primera que permitirá conocer la visita a los locales de servicio de cuidado diurno (guarderías) por parte de la acompañante técnica para el llenado de información; de esta manera será posible ver la manipulación, recojo de información y registro de la misma por parte de la acompañante técnica. Y una segunda fase de retorno a la Unidad Territorial del programa en donde, mediante el acceso a internet, se ingresa y socializa la información recogida. Ambas fases se realizan en un mismo día, por lo que se espera poder realizar la observación en dos sesiones.

<sup>12</sup> Este número ha decaído en 1 punto porcentual aprox. en relación al año 2013.

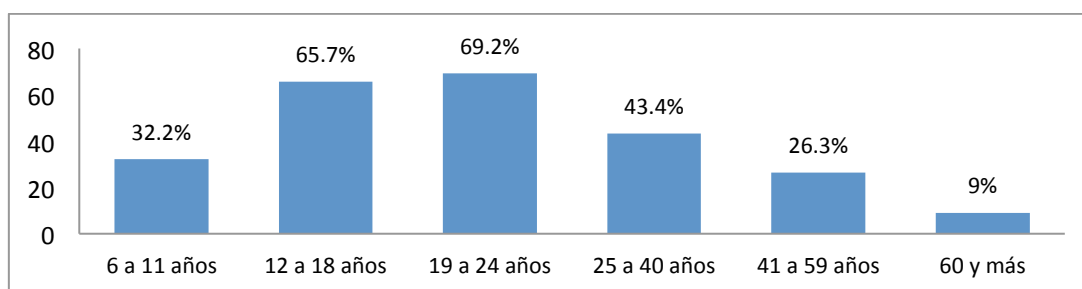
Type of area	Oct-Nov-Dic 2013		Oct-Nov-Dic 2014	
	Computer	Internet	Computer	Internet
Total	32.8	22.1	30.8	24.3
Lima Metropolitana	54.9	44.4	51.9	47.1
Urban Area*	34.7	18.2	32.5	20.7
Rural Area	5.7	0.7	5.5	1.4

\* It doesn't include Lima Metropolitan (capital).

Fuente: Instituto Nacional de Estadística e Informática, Perú 2007

If we continue noticing the difference between population, we can note that in use of internet terms, men stand out with a major percentage to use it (43%) than women (38%). (INEI, 2014). However, when we see uses of internet according to age groups (see table n.º5) it results evident that the younger population (between 6 and 24 years old) is the one that uses more this service. It is remarkable the percentage contrast between people between 25 and 40 years old (43%) with the people of 41 and 59 years old (26%), where the first group evidence a major use of internet with a difference of 17%. It should be pointed out that TC form part of both age groups

**Graph n.º 5. Perú: Percentage of population of 6 years and older who uses the Internet, by age group, 2014 (Fourth Quarter)**



Fuente: Instituto Nacional de Estadística e Informática, Perú 2007

Elaborated by the author

In the background of age groups, the use of internet also can be defined according to the educational level of the population, the majority of people with a educational level as superior university student (86.4%) and superior (65.7%). In a minor measure we can see that people with only high school use internet at a 44% and below we can find a 17% conformed by elementary students.

It results remarkable where did they use internet and with what kind of purpose, either from a computer, tablet or cell phone. In the case of the location of the access to internet (see table n.º5) 29% are public boxes and 25% was home, being the use of internet in work very reduced in all the groups.

**Table n.º 3. Peru: Percentage of population of 6 years and older, by place of access to internet, 2014 (Fourth Quarter)**

<b>Total</b>	<b>100 %</b>
<b>Just at home</b>	<b>25.3 %</b>
<b>At home an another place</b>	<b>12.8 %</b>
- At home and at job	3.8 %
- At home and an educational institute	1.9 %
- At home and a cybercafé	0.9 %
- At home and in another place (by cellphone)	6.2 %

<b>Just in a cybercafé</b>	<b>29.9 %</b>
<b>Just at job</b>	<b>3.4 %</b>
<b>At job and in another place (by cellphone)</b>	<b>1.5 %</b>
<b>Just in a educational institute</b>	<b>2.1 %</b>
<b>Just in another place (by cellphone)</b>	<b>11.2 %</b>
<b>Another place, cybercafé, job, educational institute</b>	<b>13.9 %</b>

*Fuente: Instituto Nacional de Estadística e Informática*

*Elaborated by the author*

As for the reason for internet access, they distinguished between three categories, ranking first the information (94.5%), followed by the purpose to communicate by e-mail, chat, others (83%) and entertainment (66%) by video games, download movies or music, etc. ITC uses that are not mutually exclusive and are associated with the sectors of the population that has more Internet access, as it is the young people and in particular population with a higher education level.

### ***Technological context of study cases***

As a part of the flow of information, monitored by the head office, the TU should count with a minimum of ICT. The devices that we found were:

**Tabla n.º 4. TIC disponibles en las Unidades Territoriales de estudio**

<b>Cusco Territorial Unit</b>	<b>La Merced Territorial Unit</b>
<ul style="list-style-type: none"> <li>• 7 Computers (Corei7, Pentium III)</li> <li>• Red: Modem, fireware fortinet</li> <li>• Videoconferencing system (Policom)</li> <li>• Laptop: 1 for coordination</li> <li>• Institutional mail.</li> <li>• Phones smartphones (for the specialists)</li> <li>• 12 tablets (for each technique companion)</li> </ul>	<ul style="list-style-type: none"> <li>• 8 Computers (i7, Pentium III)</li> <li>• Red: Modem, fireware fortinet</li> <li>• Videoconferencing system (Policom)</li> <li>• Institutional mail.</li> <li>• Phones smartphones (for the specialists)</li> <li>• 20 tablets (for each technique companion)</li> </ul>

*Fuente: Instituto Nacional de Estadística e Informática*

*Elaborated by the author*

These were the ICT stipulated by the technical teams as property of the TUs. The only ones that did not belong to the TU were tablets and smartphones. The majority of computers were bought in 2012, but each TU had at least 3 Pentium III computers, a older model, received from the previous program called Wawa Wasi.

Computers were used mainly by the coordinators and specialists, principally by the computer technical because he is the one who receives and verifies the information entered to the Cuna Net System, from the digital cards of the tablets or the physical cards that the program mantaines.

In access to internet matter, in both locations, we were informed that the bandwidth of the area did not allow a sustainable access to this service, mainly because geographic or climate problems (altitude and rain season, respectively). That is that the TU of La Merced did not count with internet for a month in the offices, that was the reason that institutional mails were sent to Lima with personal modems, public boxes, cell phones or at home.

In the case of technical companions they were suggested to return to the offices of TU to send the card to the Cuna Net System. The card can be downloaded and filled in with out internet but it requires of this element to be sent. They had to opt for the strategies mentioned before. For

example, some of the technical companions of the TU of La Merced indicated that they reached internet in the plaza in front of the municipality; however some of them declared to have been theft.

In general, the motive of the robbery of the tablets was a recurrent issue in the TUs visited due to the movement of the tablets in order to send the cards by internet. Most of the mentioned robberies have done in public boxes or in the plazas where the wifi was free.

This situation was more critic in the TU of Cusco, where the TC had choose to not carry the tablets with them for the fear to be theft. In that case, they used a printout of the card of Security and Infrastructure or notebooks where they could write the information to later fill in the tablets from their home. These case of the stop of the use of tablets was known in the head office, however was indicated as a isolated case.

Finally, the sessions of videoconference were considered as a relevant media with the head office. These sessions between the head office and the TU could have a monthly frequency (depending of the causes) and permitted the development of trainings, reports of information or incidents that happened in the TU.

Up to here we have described the technological context of the accessibility of devices and connections to internet that has the program in TU. However, the technological context of information system based on ICT that manages the program es more complex, because it is connected with the relation between the objectives, which them has been created and the contrast with the information that can be collected in practice.

The objective of the collection of information in the Security and Infrastructure Card was designed to monitor the security of the locations of service. However, the way how it has been designed the card has a proposal that assumes homogeneity in all stablishment, homogeneity in involved actors and has been designed by an urban vision of the service.

We say that the card correspond with a urbanized vision of the service because the stablishment in rural areas are not private, there are communal locations; rented or facilitated by the Management Committees assign to the program. Since there are not stablishment that owns the Cuna Más program, these can vary in space in m2, in infrastructure and sanitation, in near environment (door to avenues or streets, open fields, altitude and conditions of the floor, etc.)

Taking as a referece the locations of study, in La Merced and in Cusco there were two type of stablishment. The CCIA (Child Centers of Integral Attention) and the communal locations. The first were characterized for having an infrastructure more modern and stable (concrete, cement floor, connection to water and drainage), the second could be of adobe and with unstable floor, as seen in rural areas, being these condition a risk for the children. We can sum a characteristic fact of houses of rural areas, they do not count with locked doors, fact that can expose child to the entry of a person or a animal of the area. Unthinkable situations in urban locations because the insecurity by car accidents, robbery, etc. imply more mistrust and preservation of the house under lock or closed.

Illustration n. °1: Children centre backyard – Tejedores de Lamay, Cusco





Illustration n. °2 Ingreso al Local Comunal del SCD Cuna más – Distrito de Lamay, Calca, Cusco.



Illustration n. °3. Interior del Local Comunal del SCD Cuna más – Distrito de Lamay, Calca, Cusco.



Another detail in which the card does not adjust to rural areas is to assume the constant attendance of child. We can say that the card pretends to identify irregularity in the attendance; however, in rural context –where the number of scholars dropping out are much higher than urban locations- kids don't go with regularity to the service because climatological factors (cold and fear to sickness from the parents to their children), and increase in field work (harvest season) or migration for work matters (sporadic work of the parents into nearest provinces).

Finally, noting the designed questions for the carers, the verification of their hygiene and documentation assumes that they are in an environment where the access to water for the personal hygiene and presentation is a guaranteed service; however, these contrast with the shortage of water of the zone (lack of infrastructure of potable water and sanitation) and low resources of the carers to pay for these service. This situation also implies child that are poor and extremely poor.

Therefore, the issues of the card can generate errors in the sample. Those who does not know what option to mark, because a serie of subjectivities that are not controllable such as the fear to harm their work partners or because the questions does not adapt to the condition of the place.

### ***Training in the management of the tablets***

The majority of the technical companions from Cusco and La Merced remembered the announcement of the arrival of the tablets and the expectation that these generated. The



enthusiasm lied in te possibility to enable to stop filling the card in a physical way and insert it at an Excel every week.<sup>13</sup>

The official delivery of the tablets was given to all TC that join the program in 2012, the one who entered later received their tablet two weeks later they joined the group of TC. The procedure of delivery consisted in the fill in of a notice letter. The expectation generated sensations of enthusiasm and/or a little bit of fear for not having the knowledge and command of the new tool:

«They gave me a tablet and I felt some trepidation at the beginning because I did not know how to turn it on. I had never handled a tablet, but did have a laptop, a tablet no. I was afraid to turn on and some I did not want to bring tablet, to handle my other companion that he could, right? but I said no, you have to take the tablet.»  
(CUS.ENT.AT.5)

«Because when I entered told me they would give me a tablet to my monitoring surveys. And just at the meetings I saw that all the technical companions brought their tablet, then. I was pleased. It makes me feel free of writing by hand, it is easier. There they told me they were going to provide a tablet ... I felt happiness.»  
(LAM.ENT.AT.1)

The notice letter of the tablets consisted in the signature of a commitment of the TC on taking responsibility in front of any eventuality that could surge to the tablet. The commitment indicated that it should replace in case of loss, or give the quantity of the value that the device implied. This where the first situations respect to the perception of fear by the use of the tablet, as we'll see lately.

In order to TC to fill the cards, they received training. The workshops and orientation changed according the order of entry of the TC or according to the context of activities of the program. The range of variation between sessions were since 30 minutes to sessions of three days that take several hours during the labour schedule.

The more extensive sessions where about: i) the use and exploration of the tablet; ii) general management in excel and word in the tablet, iii) fill up the card and iv) save of files, capture of images, photos and videos for the register of evidence of the advance in children and situation of the locations. However, including at the interior of the TU the experiences of the treated topics where differentiated, difussing the perception between TC, that they would like to be trained in more topics and in the knowledge of the ICT.

In all TU, who were in charge to make this training were computer especialistas.. When asked about the development of the TC in this electronic sessions, they mentioned feeling shocked by the low knowledge of tool as basic as Word, Excel or the management of main buttons in digital devices.

## **4.2. Appropriation of ICT**

Now we will present characteristics of rural environment and users of tablets (technical companion) who will determine the type of use and the tye of appropriation.

### **4.2.1. Environment of <<domestication>> of the ICT**

In this section we show you the conditions in which the management of the tablets make place and the fill out by the TC, differing in three areas of domestication: technological, social and economical.

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<sup>13</sup> En el TDR de las acompañantes técnicas se especificaba que estas tuviesen conocimientos básicos de informática en el uso de Excel y Word.

**«Technological domestication»**

The management of the tablets by the TC is determined by geographic characteristics of the environment (Access to internet and type of bandwidth) and use policies (formal and informal) that established the program and/or the TU.

**Tabla n.º 5: Principales características del entorno tecnológico**

Digital device	<ul style="list-style-type: none"> <li>Many companions technical agreed in saying that the tablet is easy to handle for them and they were lightweight. The tablet entailed the integration of the functions of a field notebook, camera and laptop to write reports.<sup>14</sup></li> <li>Technical failures of the tablet. The TC from Cusco and La Merced reported that the tablet had the following problems: misconfiguration of the date of the device (affecting the date of issuance of the report), battery discharge and</li> </ul>
Effects of the geographical and social environment	<ul style="list-style-type: none"> <li>Insufficient Internet bandwidth in both TU. Technical companions reported that this is even scarcer in the areas of greatest height above sea level.</li> <li>The TC from both TU perceived insecurity in the whole province entailed them feel concerned to take the tablet with them. In the case of TC from Cusco, mostly they did not carry the tablet with them.</li> </ul>
Filling context of electronic survey	<ul style="list-style-type: none"> <li>Difficulty in filling out the electronic survey. This occurs due to the presence of children who are attracted by the tablets. Also when filling out the survey is interrupted to address situations in local, such as talking to care-ers about the situation of children or acquit doubts they have, talk to parents who come to the center, take children, and / or to leave the room to take a phone call from UT for any request.</li> <li>The TC are interrupted in completing the survey due to the different time of arrival of children; plus each child must receive a "welcome" (announce their arrival as a process of adaptation) as part of the learning objectives of the program.</li> </ul>
Related to Cuna Mas Program characteristics	<ul style="list-style-type: none"> <li>Use Policy. Currently, the program has no formal rules of digital devices. However, the coordinators of territorial units transmit the same rules, which are organized among those that define the use of tablets to fill the survey (prohibitions regarding downloading applications, files, use personal email, etc. ) under the assumption that this will make the tablet becomes "slow" and rules that discourage bring the tablet, such as having to pay in case of loss (cost is deducted from the salary of aT). Finally, it was established that it was forbidden to display photographs of the program service in a personal account, as is Facebook. It reiterates that its use is exclusively for work.</li> <li>Multiple functions of the TC. Accompanying techniques, by regulation not dedicated only to fill in the survey, but its main function is to be responsible for a management committee; in addition to performing administrative tasks in practice, monitoring, educational and training to caregivers (in health, food, etc.) and</li> </ul>

<sup>14</sup> En palabras de una Acompañante técnica del Cusco sobre el tema: “me sirve para aplicar mis fichas de monitoreo, de cualquier cosa te salva, tienes que presentar un informe y ya lo haces de ahí, es más liviana y lo puedes trasladar de un lado a otro porque a veces trabajamos en campo y es difícil llevar la laptop. ...» (CUS.ENT.AT.1)

	<p>assistance to training sessions themselves. In conclusion, the importance and urgency of the other tasks leads to the TC write down in a notebook or postpone filling the tablet when they are in their homes depending on what they remembered having seen or pointed.<sup>15</sup></p> <ul style="list-style-type: none"> <li>• Multiplicity of information gathering tools. Along with the survey of Security and Infrastructure, during visits to local AT must complete the "Notebook local" which certify his visit and register any incident, and its own "field notebook" where they record the performance of the caretakers in weekly meeting around the "Sheet learning experiences" of children. In addition, on the shelves of local files are the children with documentation that consigned physico-in upon entering the service, and are consulted by the technical companion when filling the form.<sup>16</sup></li> </ul>
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*Fuente: observation, interviews  
Elaborated by the author*

In spite the previous table, the limitations for the use of the devices are numerous, it is important to point out the strategies that apply the TC to a) use the tablet and b) the fill out of the card.

#### **a) Strategies for the management of the tablet**

When there were technical defect in the tablet the users reinitiated the machine, took it to a computer specialist o took it to the computer specialist of the TU ir order to format the device and then help them install the programs that they considered basic (Word, Excel, power point)

When there were problems with the access to internet, the TC of both provinces choose to buy a claro or movistar modem of a minimun price to access internet (however, its speed was limited). A second choice was to connect their own cell phone to a tablet to use the wifi of the phone. Finally, the choice was to access from their own houses, public boxes or a place were the wifi was available., el acceder desde sus viviendas, cabinas de internet o algún lugar con wifi disponible.

In case of fear in case of robbery of the tablet, the TC principally from Cusco, started to take a physical version of the Card o Security and Infraestructure. However, the format of this card did not facilitated the fill in of the card, so they opted to take the card as a recordatory of the questions, the answers were written in a notebook. They filled in the card in the tablet was off work schedule in the TU or in their home.

Respect the policies of use the majority of the TC fear the use of the tablet for personal purposes. However they downloaded music and images. To avoid problems they kept the information in a personal USB.

En cuanto a la política de no evidenciar en fotos al programa, todas coincidieron en que no lo hacían en sus cuentas personales de Facebook (las que tenían, sobre todo las más jóvenes), a

<sup>15</sup> Notas de observación participante del día 27/01/15 – Chinchero, Cusco: “8:10 am. Mientras esperábamos, la AT 4 se ofreció a comunicarme con la acompañante técnica del Comité de Calca para que vaya yo luego a visitarla, pues me comenta un poco apenada que acaban de llamarla en la mañana para que se reúna con uno de los especialistas en una municipalidad. Me cuenta que están negociando la posibilidad de que la municipalidad preste un local al programa para abrir una nueva cuna, por lo que es urgente que se reúna. Por eso es que, me dice, dejará su monitoreo a medias y luego en la tarde retornará al local a finalizar la ficha. [...] Más adelante, durante el llenado de la ficha de la tablet la AT es interrumpida por la llegada de la madre guía, quien ha venido con el presidente del comité de gestión para llenar unas planillas sobre los locales y gestionar sobre los recibos de agua y luz del local.”

<sup>16</sup> La documentación consiste en: copia de partida de nacimiento o DNI del niño, fotocopia DNI del padre/madre o tutor, recibo de luz o de agua, tarjeta CRED (tarjeta donde se registra la evolución del peso y tamaño del niño, se realiza en postas), copia de seguro de salud (afiliación la SIS), documento de compromiso del tutor.

excepción de una que manifestó haber evadido la regla ante una situación que a ella le generaba orgullo:

“El año pasado tuve la oportunidad de que a mi comité cuando yo estaba me visitó el banco mundial, puse esas fotos, de la visita, de todas maneras es un orgullo, no?, osea las cosas buenas del trabajo si público, no? En mi fb también está la página de cuna más, y cuando hay informaciones necesarias también las comunico” (CUS.ENT.AT.7)

Al preguntar a la coordinación de la Unidad territorial del Cusco más bien se encontró una percepción de que las AT no aprovechaban mucho las funciones de registro fotoGraph de la tablet: “Pueden tomar fotografías, pueden filmar algunos momentos con los niños, registrar eso, no lo están haciendo, pocos me muestran eso.” (CUS.ENT.COO.1)

The TC recognized that the access to ICT was very important because it facilitate access to varied information.

La tablet era manipulada como una herramienta para mostrar evidencias del cumplimiento de uno de los objetivos que, desde la UT les habían pedido que prioricen, el garantizar que las cuidadoras sigan la “Ficha de experiencias de aprendizaje” la cual debe generar un desarrollo social y cognitivo del niño. En ocasiones, el tiempo que se utilizaba la tablet durante la visita estaba más enfocado en el registro fotoGraph en lugar del llenado de la ficha. Por ejemplo, durante la realización de una observación participante en un local del distrito de Lamay (Cusco) se pudo apreciar que la AT utilizó la tablet principalmente para tomar evidencias de las actividades de los niños:

10:40 am. AT vuelve a revisar sus fichas de “experiencias de aprendizaje”, “¿Dónde tienes las cuentas y los pasadores?” consulta la AT y la cuidadora le señala una caja. AT saca de una de las cajas unas mantas y les pregunta a los niños si quieren jugar con la manta. La AT hace que jueguen de a dos, que agarre cada uno los dos extremos y en el medio pone una pelotita. Los niños deben mover la manta sin botarla, mientras las cuidadoras y ellos cantan una canción sobre lo que hacen. La AT agarra nuevamente su Tablet y registra este suceso. 10:50 am. AT deja de la Tablet mientras supervisa el juego que es continuado por la cuidadora y madre guía. La AT al verlos jugar nuevamente agarra la Tablet y toma fotos y graba un video nuevamente (esto puedo verlo a través de la pantalla de la Tablet). Luego de esto vuelve a dejar la Tablet cerca de una de las ventanas y se reincorpora al juego. Minutos después la vuelve a coger para guardarla. Termina de usar la Tablet a las 11:00 am. [Notas de campo 28/01/15 – Distrito Lamay, Cusco]

Debido a que la AT tiene otras actividades que priorizar para el cumplimiento de sus objetivos, el empleo de la tablet se torna en una actividad que toma tiempo y que es pospuesta o reducida en su llenado.

#### **b) Strategies to fill the card**

Ubicate themselves in a area away from the kids to fill in the card. However, this implicated being apart the carers to fill in information about them like questions about their hygiene.

The majority of TC indicated that the fill out of the card was quick and that there were options reiterative and/or evident, like questions refered to the DNI od the carers or their cell phones.

These were the main strategies:

- Put an hour of reference, kids have different hour of arrival.
- Fill reiterative data with (00).

- Use the question about the hygiene of the carers as a alert call and not as a verification of their appearance. If the TC grade the hygiene of a carer in a bad way, the receive a discount in their salary<sup>17</sup> so TC avoid checking nails of carers, as an example.
- Register what is not in the service and not what they do have to avoid reiterative questions.

### «Social domestication»

Social domestication is all the support that the TC had to use their tablets. We could find two profiles of TC in function of their knowledge in the management of ICT, outside the provided training.

The first profile are the older TC of both provinces. Those whose age is between 40 and 55 years old and have taken clases of basics in Excel, Word, power point and internet. «Porque tenía que aprender, porque si no toda la vida sería ciega» (CUS.ENT.AT.6), contaba una AT correspondiente a este grupo que por motivos laborales se vio motivada a aprender a manejar esta “herramienta”, refiriéndose a las computadoras. Asimismo, una motivación fuerte para ellas era el poder ayudar a sus hijos en encontrar información en internet para hacer sus tareas y/o sentir que ellas estaban al mismo nivel de manejo de informática que ellos. Es así que los hijos y cónyuges han sido un apoyo para el aprendizaje de las TIC pues recurrían a ellos cuando tenían alguna consulta.

The second profile is conformed by younger TC, under 40 years old. They have receive classes of digital devices since scholar phase to university, having a better knowledge of the programs of Office. For them, the tablet is not such a different thing than her computer or laptop. This group likes to communicate by social media (Facebook, twitter, chats, etc.)

The most frequent criticism was that the workshops to be conducted in large groups was difficult for them to make inquiries because they felt a little intimidated to perform them. The TC acquitted doubts then through personal consultations to computer specialist, by consulting colleagues who have demonstrated mastery acquired over the tablet, or on their own.

Entrevistadora: ¿Cómo fue esta capacitación? Entrevistada: Fue muy breve. Primero me dio mi *password*, después cómo se ingresa, sobre todo la ficha de monitoreo, cómo se tiene que rellenar sobre los niños, poner los nombre. Todos los datos que te pide la tablet. Eso que es lo básico, pero también siempre existen dudas, ¿no? porque en 15, 10 minutos tu no vas a aprender todo el manejo de una máquina, de una tablet, que la verdad tiene un sinfín de uso. Entonces en esos minutos no vas a llegar a manejar todo eso. Prácticamente aprendí más usándola. Haciendo solita, equivocándome pero ya aprendí. También consultando a otras compañeras cómo estaban haciendo uso de esa herramienta. (LAM.ENT.AT.1)

Because the techniques companions are usually beyond the territorial unit (where the specialist is in computer science), as they are making visits to local or meetings with other TC, benefit to acquit his doubts with their own colleagues.

### «Economic domestication»

The use, mantainance and movement, among others, implied a series of expenses that transform the costs in (including the fact that were very low cost) discourage for the use of the tablet. The costs of the use of tablets by the TC were:

- a) *Purchase of modem of portable internet*. Actually, these can have a cost between 35 to 90 nuevos soles or even more depending on their capacity of storage. Even though their effective connection to internet was not guaranteed (flaws or slowness of the

<sup>17</sup> Actualmente el programa maneja tres tipos de remuneración para las cuidadoras, quienes operan en el servicio en calidad de voluntarias al ser propuestas por el comité de gestión. La calificación que le de las AT las ubica en categorías A, B y C, lo que puede influir en un aumento o descuento de 30 nuevos soles aproximadamente.

connection), these was a frequent alternative between TC. Furthermore, the TC that connect their tablet to their cell phones, consume its megabytes, reason for the TC to change their cell phone method of payment in order to count with more megabytes.

- b) *Investment in connection to wifi.* In order to send the cards on time to be entered in the Cuna Net System, the TC that were not near their TU used internet in their homes or places where they stayed, that was the case of some TC that rented rooms to be nearer their monitored areas.

However, the connection at home plus the use of electric energy to charge the battery, usually were not perceived as an investment, in contrast with the payment in public boxes.

Another TC investment modality was to consume at locations like restaurants and coffee shops where the wifi was free.

These places had higher costs comparing to other locations of the area: *“Aquí tenemos lo que es pichanaki, hay un cafecito, tinta café, ahí nos da password. Tú vas, consumes y te dan wifi, ¿no?” (LAM.ENT.AT.3)*

- c) *Maintenance.* The care of the tablet implies to preserve it in good condition. That is the reason of the purchases of isinglass every certain months to cover and protect the screen of the tablet from superficial cracks. These micas had a approximated cost of 5 nuevos soles. Additionally they bought cases to avoid damage in case of fall, these cases costed between 10 to 20 nuevos soles, depending of the model of the device.
- d) *Tablet Repair.* In these case many TC preferred to go to a local technician (located near markets) who could repair the device for a price under 40 nuevos soles. These was done to avoid to notice the TU in case they considered that the flaws were caused by the TC. Another motive for these behavior was the earn of time due to the established procedure of the head office: When a tablet showed a lot of flaws it should be sent to Lima to be checked, repaired or replaced. However, the majority of times that were sent did not come back or arrived many months later.
- e) *Payment for replacement of the tablet in case of robbery.* The expense in case of lost or robbery of the tablet was considered as a huge sum by the TC. This case included a warning call and a monetary reparation of a 1500 nuevos soles discount of their salary during a month (their monthly salary is near 2500 nuevos soles approximately). About these matter the TC considered that these situation was not justified because they also exposed themselves taking the tablets with them and because the amount that was discounted was superior than the original price of the device:

*“Justamente como no tienen el internet en la tablet, se fue a una cabina y le sacaron, ¿no? Ahora, para eso a ella le han tenido que cobrar no el costo de la tablet. El costo de la tablet, así viéndola de la marca que está dando el programa es un por lo mucho 800 soles y le han quitado casi un sueldo. Más le han cobrado, ella ha estado bastante indignada, no tengo idea cuánto pero es casi un sueldo, en varias oportunidades le han tenido que descontar su sueldo. Entonces es una gran responsabilidad. Y viendo esa experiencia, las demás se desaniman, ¿no?” (LAM.ENT.ESA.1)*

The expenses mentioned before plus the expenses in transportation and lodging to visit the locations of Management Committees that were assigned to them, turned out to be discourages for the compliance of TC functions, having as a consequence the use of notebooks (with or without the tablet), the commit of printing expenses and the investment of extra labor time to send cards at time.

#### **4.2.2. From use to appropriation of ICT**

To answer appropriation of the use of ICT in the program, first we will differentiate the valuations that TC give to the tablet and then, in second place, we will analyse their impression in relation to la Security and Infrastructure Card of the program.

##### **About the tablet**

For almost all the TC, the management of a tablet allows an easier way to insert information than the physical cards.

“me sirve para aplicar mis fichas de monitoreo, de cualquier cosa te salva, tienes que presentar un informe y ya lo haces de ahí, es más liviana y lo puedes trasladar de un lado a otro porque a veces trabajamos en campo y es difícil llevar la laptop. A veces encuentras un internet y tienes que llevar la laptop, entonces ahora no es necesario. Entonces lo que es en office, me ayuda en las fichas de monitoreo, para presentar videos, digamos, si estoy en incidencia y tengo una reunión con un regidor, le presento rápido, no necesito prender la laptop. Personalmente para mí me ayuda en todo y considero que sí, lo suficiente, ¿no?” (CUS.ENT.AT.1)

On the other hand, the tablet eases the work of formers because the TC can show evidence of the way the carer is treating the user child. The technical team of the TU, especially the TU of La Merced, refers that management of ICT has given them new knowledge

Entrevistador: ¿Consideras que el uso de la tablet les brinda alguna competencia a las At de tu Unidad Territorial? Entrevistada: Ellas ya dominan su tablet, toman, fotos, sí dominan su tablet. Tienen su laptop, siempre traen su laptop, de la tecnología están bien adelantaditas. (LAM.ENT.FOR.1)

When the TC were asked how would they feel if the program decide to drop out the tablet initiative they answered that they already were used to them and that it would be difficult to go back, mainly the TC from La Merced, because with this device it was very difficult make mistakes or lose physical documents (because they were already not necessary at all, now). Finally this tool gives a new status to the program, as indicated by a TC, telling that with a tablet she felt that she could show advances of the program to authorities, as well as images of the condition of the locations in order to receive help from local government.

#### ***About the card of Security and Infrastructure***

When the TC were asked of the usefulness of the cards, most TC re-marked as main benefits: a) send information of any strange situation present in the children, b) detail if there is a problem with the location and carers, c) regularize user kids documentation, the total quantity of users per location (and how much can be received to maintain a fine development in the location) and their attendance.

Joined to the recognition of the mentioned benefits also arised critiques in the design and filled in of the cards:

**Tabla n. ° 6: Principales críticas y sugerencias de las Acompañantes técnicas del PNCM al aplicativo de la Ficha de Seguridad e Infraestructura**

Related to the survey design	Related to filling the survey
<ul style="list-style-type: none"> <li>• The details of this information can not be accessed once it enters the tab. That is, when a case of a child that shows any signs of abuse, for example, have to aim this information, too, in his notebook because they will be able to find more easily. There is no feedback of the tab for them.</li> <li>• The survey questions are closed, making it difficult to target details on the progress of the children or the situation of the premises.</li> <li>• Monotony of the survey, because they must enter the same data (DNI of the caretaker and his cell number, objects in</li> </ul>	<ul style="list-style-type: none"> <li>• Time used for filling the survey is large.</li> <li>• The record is updated only when internet.</li> <li>• When you have entered data for a new caregiver or child tab crashes.</li> <li>• Some information is entered with 0, because it is considered to be not so relevant. For example: Cell (00000000), DNI (00000000).</li> <li>• Difficulties were presented when the survey was modified and did not know what was to be followed because they had different themes.</li> <li>• The new values entered (new caregivers</li> </ul>

the room, etc.) The information is collected weekly but shipping monthly

- There are data that do not verify the reality. For example, the psychological condition of the care-ers can not be measured only to indicate if they have psychological certificate or not.

or children) are not updated quickly.

- Children want to play with the tablet while it is filling the tab.
- The tablet is hung during filling of the tab. Some indicated they expected about two hours to work normally.

*Fuente: entrevistas en UT La Merced y UT Cusco  
Elaborated by the author*

Entrevistadora: ¿En qué medida el uso de la tablet te facilita o dificulta tu trabajo como acompañante? Entrevistada: Facilita y a la vez dificulta. Facilita porque es rápida la subida. Pero dificulta a la vez, como te decía, no hay actualización constante, ¿no? Se supone que va a un sistema, debe ser espontáneo. Se actualiza y cuando vuelves a abrir la ficha, debe estar actualizada, ¿no? Porque sería una carga obsoleta 4 veces cargar lo mismo. Nuevamente subir el mismo nombre en otra sala, en otra sala y no tiene sentido, debe ser actualizado. Pienso que eso es por el acceso al wifi que tiene. (LAM.ENT.AT.5)

After been done the questions about the content of the card, the TC of Cusco and La Merced pointed out that the usefulness of the implementation of these tool consists, mainly, in the generation of a benefit to all the program; not direct benefit to themselves, but to the head office. The two benefits of the use of tablets, since their perspective were:

a) *Surveillance of the activities of the TU.* It was extend widely the idea that tablets had GPS to monitor if the TC were doing their job, to see the content of their tablets and, by the delivery of the cards, verify the accomplish of their functions.<sup>18</sup> These ideas were mainly a rumour founded in TUs that was denied in the interviews with people of the head office; nevertheless these ideas were present in every comment of the TC.

b) *Unidirectional management of the information sent to the head office.* The information was sent weekly, under the supervision of the coordination. The deadline to send the cards was every friday, or, in case of inconvenient, on monday (The Cuna Net was operational from Monday to Friday). When the computer specialists where asked, they pointed out that the computer-processed information arrived (from Lima) with a month of delay, because they had to wait for the information first to be sent at a national level and then, with the information they generated reports. These reports arrived to the coordination of the TU and the computer specialist, but there were not available for TC. That is why TC indicated that they can not review the information at the level of their own locations, information that they have sent with the commentaries that they have add.<sup>19</sup>

#### 4.2.3. TC Expectations sin ICT

The TC more recurrent expectations can be organized by the range age (mentioned before) in relation with their management of ICT.

**Tabla n. °5: Expectativas de las acompañantes técnicas de Cuna Más (Cusco, La Merced) a partir del uso de las tablets**

<sup>18</sup> En palabras de una AT: «pero había comentarios de que estaba satelitalmente monitoreado, ¿no? Y que la tablet podría ser uno de los instrumentos para que verifique que estamos en campo... nada concreto comentarios entre colegas» (LAM.ENT.AT.3)

<sup>19</sup> Respecto al beneficio principal de la Sede central con la información refirió una AT: «Yo creo que más que todo es para la sede central y una base de datos y actualización de la información, para la sede central más que todo» (CUS.ENT.AT.4)



Jóvenes (25 - 35 años)	Mayores (40 – 55 a más)	Ambas
<ul style="list-style-type: none"> <li>•Útiles pero no muy diferentes de la PC</li> <li>• Hacer referencia al manejo de las tablets podría brindar nuevas oportunidades laborales</li> </ul>	<ul style="list-style-type: none"> <li>• Adquisición de nuevas habilidades profesionales</li> <li>• Llevar más cursos de informática</li> <li>• Afianzar conocimientos en trabajo actual</li> </ul>	<ul style="list-style-type: none"> <li>• Empoderamiento por ser poseedoras de una TIC (en la interacción con cuidadoras, autoridades locales, etc.)</li> <li>• Adquisición de tablet</li> <li>• Inscripción en cursos virtuales (mediante tablets o computadoras) para seguir capacitándose en temas de educación.</li> </ul>

*Fuente: entrevistas*

*Elaborated by the author*

The management of the tablet has implied and *appropriation of sense* for the TC: From a professional challenge to a new ability, “the management of ICT”. The perception of this new ability, in the case of older TC, has motivated to keep searching on its use (by query to the specialists of the TU and their colleagues) with the purpose to remain accomplishing their functions in their actual job. Meanwhile, in the case of younger TC it is remarkable the expectation of the newly acquired ability as a competence that can influence if they apply to other jobs.

Other impressions of the TC were referred to the contribution that they felt gave the program to help the next generation of children of their district and in a national level. The tablet symbolised in itself as a tool of progress that was going to generate information in order to accomplish the objective of the program by others (specialists in the head office): to reduce the gap in child development. TC did not see themselves as immediate generators of this effect.

What can we say, up to here, about the appropriation of the use of tablets? TC had different opinions between them, generated by the age difference, but they agreed about the importance of the tablet as a technological device in itself, device that were open to acquire for themselves because they got used to it use and because the ease to review their professional and personal issues. Regarding to the appropriation of objectives, we could say that the answer was too general; meaning that TC considered that the card provided benefits to the program but they considered that it had flaws (monotony) and that did not allowed the review of information inserted of their locations.

However, the variables of gender and type of employment were conclusive to define the TC type of expectations and possibility to expand abilities; therefore we define the TC work as a <<gendered job>>. For starters the TC job was assign, mainly to women eventhough this is not defined in regulations of the program. Each TU could choose men or women for the position of TU; however there was a preference to hire women because they would be in touch with children under three years old and with the carers of the service, characterized to be women of low educational level (many of them with out highschool studies), specially the ones of rural areas. These facts supposes, on one side, that there is more trust in TC who are women to treat with children and other women. And, on the other side, supposes that their gender can be useful for their “maternal” role that can note as irregular, topics as the hygiene of kids, their diet and behavior; in addition to be able to compare the hygiene of other women (carers) with their own.

The condition of being women is the first motivation to hire TC, even more than their professional feature. The proposal of the implementation of ICT, as these one does not motivate the empowerment of women because it is expected that TC fulfil a gender role before a

professional role. Therefore, TC in their use of tablets, as not being owners of the devices and as being submitted by norms and by the compliance of a role; does not acquires the “liberties” that imply these devices.

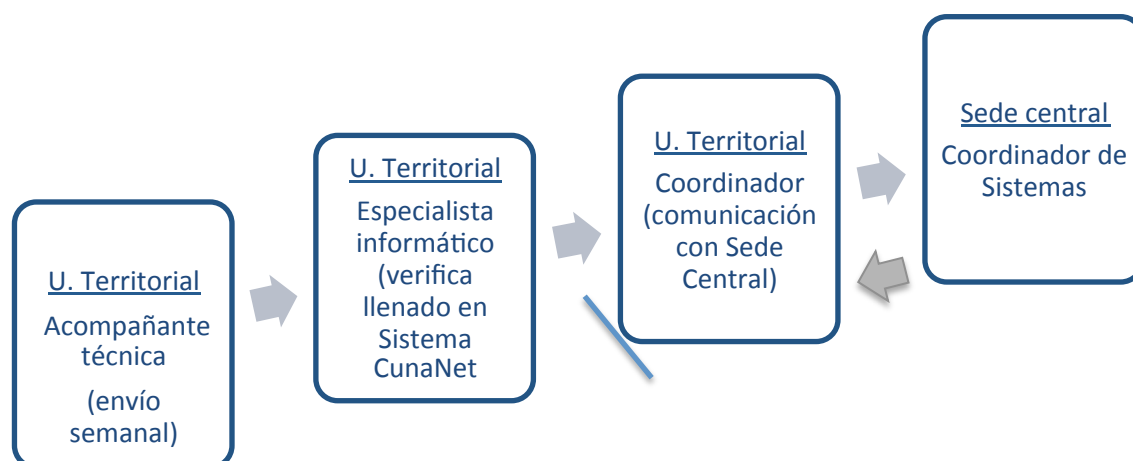
### 4.3. Effective participation in the flow of informaton

Next we will present how the phases of appropriation and participation of ICT by the TC are defined by the way of how it happens the flow of information in: i) the possibility of access/reception of the information that has been entered and ii) that their suggestions of modifications of the Card of Security and Infraestructure could take in to consideration by some formal mechanism of the program.

The flow of information that manages the program based in the app of the tablet and the Cuna Net System, goes like this: Cards of Security and Infraestructure are filled in daily by TC, the computer specialist of the TU verifies that all TC of the TU had entered this information and notifies to the coordinator. The coordinator verifies any mistake of TC, if find they send her a notification. The information arrives to the head office. The System Coordinator and his team reviews the data. The process finishes when the TU reports that the all the TC have filled in their cards.

In order to be in a information flow, these information should have some type of return receipt, however it only returns from the head office to the coordination of the TU, area that can send the information to the specialists (of health, nutrition, etc.), formers and to TC if the coordinator seems relevant to do that. Any ways, in order to have some return receipt of information, TC needs to ask for that information, because the app does not have the option to review the content by local once sent the card.

**Graph n. °3: Flujo de información del Sistema Cuna Más – Ficha de Seguridad e Infraestructura**



*Elaborated by the author*

In this way, the function of the card to monitor in all levels does not accomplish; it can be measured the fluctuations of numbers at a national level, comparing with TU about security of the children an infraestructure of the locations; but does not conclude in the dairy monitory of the users that operate the tablet and make track to the locations.

In the information system of the health area is usual to have different levels of information reports, required by different actors according to the decisions that have to make in order to accomplish their objectives. In the case of TC, what they need is information that can allow them to evaluate the security of the locations, the carers and the user child to make opportune decisions. The TC, by not having the information in a direct form, have difficulty to accomplish their monitoring labor in the topics of the information that enters into the card.

Actually the possibility of making suggestions and critics about the cards inserted in the tablets are limited because there is not a formal mechanism that can collect them take into consideration in any way (personally, videoconference, survey.etc.)

Entrevistadora: ¿y sabes que esa vez que ustedes comentaron iba dirigido a la coordinadora?

AT: A la coordinadora directamente.

Entrevistadora: ¿Lo hacen en reunión o personalmente?

AT: En reunión, tenemos quincenalmente reunión en la oficina, pero no nos escuchan.

Entrevistadora: ¿Sabes si hay una instancia formal donde las AT puedan dar sugerencias sobre la ficha y usos que se le da?

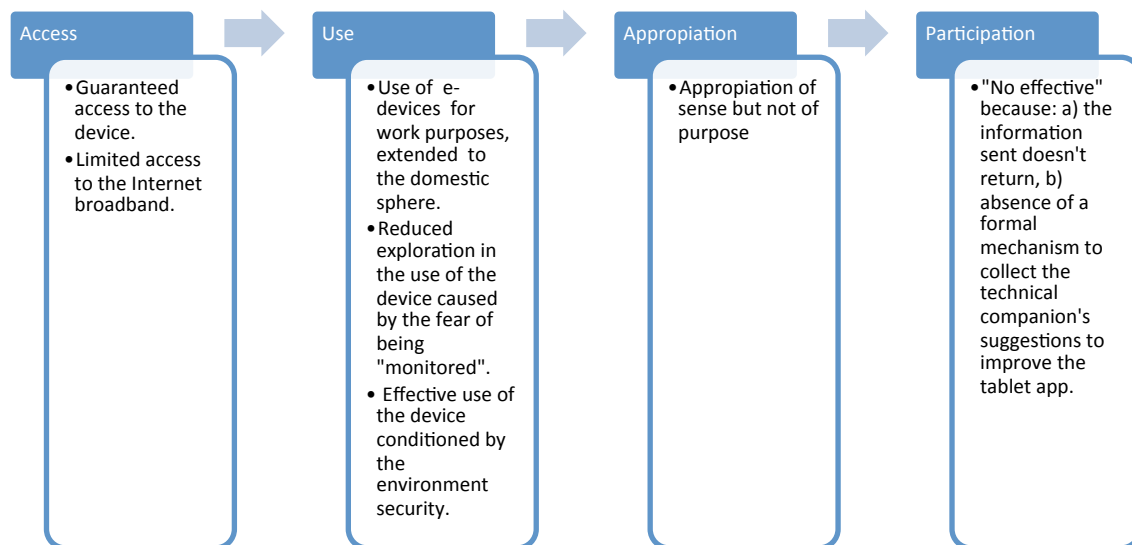
AT: Nosotros ya varias veces hemos reclamado de la ficha a la coordinadora, que es la misma cosa y ella dice “voy a llamar a Lima, voy a escribirle a Lima” pero nunca, a nosotros siempre nos ha preocupado porque la ficha es la misma, diario. Hasta sin mirar ya podemos marcar. (CUS.ENT.AT.6)

As we could see in table n. °6 there are a series of rules in the management of the tablet and the content of the cards that are recurrent in both study cases, validate by the interviews we made. However, the only channels of the TC have been noticed them in meetings with the coordinator or in some visits of specialists of the head office of Lima. Eventhough their opinion is relevant, the card remains without planned proposals of modification for the next months by the head office, just the interest to get tablets with GPS to verify that the fill in of the cards happens in the stablishments. It is been discused the possibility to include new ICT like the use of text messages from the carers of the service in case of emergency situations of the children, but there has not been made a study of costs or viability or impact.

At this stage we ask ourselves why does exist disadvantages in the access of the information from the position of the TC in the flow of hte information system. It is importante to remember a characteristic of societies of information where the possession of it and its access is influenced by how the actors of the red society distribute (Castells 2009). Nevertheless, when there is constant communication and information exchanges, the one who has a privileged position function like an “elite” in the hierarchy of a program of unidirectional type. Therefore, they enter in contradiction the logic of a electronic government who opens the access to information and the logic of actors who reproduces power relationships where the information is in a constant dispute in a conscious or unconscious way.

To synthesize, we are going to present a graph which reflects the continuum between the Access and participation in ICT systems of the technical companions of Cuna Más Program found in this research:

**Graph n. °4: Continuum acceso a TIC-participación de las AT del Programa Cuna Más en el sistemas de información**



## 5. Conclusions

Since the found results in these investigation we can approach to the next conclusions:

- The planning of the implementation of the tablet as a ICT that feed a information system has been done by an urban logic reflected in i) the expectation of the sustainability of the sending of the card by the use of internet and in ii) the homogenous conception of the service locations, the carers and the user child, expecting the risk as an "exception" instead of a typical condition of the establishments.
- The TC that uses ICT in rural areas encountered limitations in the use of the tablet. On one hand, the fact that they are professional women with superior studies allows an easier process of technological domestication because their previous contact with management of ICT. On the other hand, however, the access to ICT or to connection of internet does not guarantees an "effective use" caused by: i) external factors like bandwidth of internet in the zone, that does not allows the sustainability in the sending of the electronic card to the Cuna Net System and the insecurity in the area, fact that discourages the use of the tablets; and ii) internal factors of the program that generates a logic of "control and surveillance" of the activities not linked to their functions as TC (download of music and games, review of personal mail and facebook, videos, etc.) under the criteria that they could be harmful for the system of the tablet (virus, slowness in the device, etc.) and that they have to assume economical and social commitment (warning calls)
- These "control and surveillance" has a discouraged effect in the use of technology because has a nature that *traspases the labor area* to the *domestic* one. These happens because the tablets are portable devices taken to their own houses or public boxes (searching for signal of internet) and persuade them to extend their functions outside the schedule and labour environment, these generates, in some cases, fear to the use of the device limiting the opportunity of using the device for the development of capacities (virtual studies, download information of child knowledge, etc.)
- TC develop a series of strategies for their constant *technological domestication* (find spaces where they felt more comfortable for the fill in of the card, for example), *social domestication* (finding support in their families, colleagues and specialists of the TU to keep learning to use ICT); and *economical domestication* to pay the expenses that implies to maintain a tablet.

- TC have an appropriation of the tablets characterized to be of *sense*: They attribute a series of positive valorations of the use of the tablet as being a tool that represents to them the modernization of the program and that gives them a new ability for their job profile (knowledge of ICT). They do not have an appropriation of the *objectives* of the tablets because they do not have access to the detail of the situation of infrastructure, carers and child of their locations.
- The participation of TC in the flow of information is unidirectional because the information does not return to them. Their *participation is not effective* because i) there is no access of information (feedback) to make decisions ii) there is no mechanism that allows the collect of suggestions for the improvement in the design of the app in the tablet and the questions in the card. La participación de las acompañantes técnicas en el flujo de información, por lo tanto, es unidireccional pues no “retorna a ellas” a menos que ellas soliciten la información a quien asume la coordinación de la Unidad Territorial o es el especialista en informática.
- The information system oriented to the improvement of health and delivery of service to users of the program that is managed by the CMNP, subscribe to the Ministry of Development and Social Inclusion is an example of a public program that is in process of modernization of their procedures, by the logic of e-administration reducing the bureaucracy that implies the collect of information in its physical way into electronical information but where the previous logic prevail, the centralization of processes and collected data in the administrative core. To have updated information in a electronic system allows to see the conceptual difference between e-government and e-democracy. The e-democracy between all who are parte of the same flow is not guaranteed with the unlimited access to information because this one can be very general and less specific, but by the principle that who participates in the enter of information also can have available and make use of information in order to accomplish their objectives in the functions that they work.

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## **Anexo 1 : recojo de información cualitativa**

### **A) Selección de temas para el diseño de las entrevistas**

<b>Código</b>	<b>Tema</b>
<b>T1</b>	Adquisición de las tablets
<b>T2</b>	Capacitación en el uso de las tablets
<b>T3</b>	Aplicativo de Tablet: “Ficha de seguridad e infraestructura”
<b>T4</b>	Llenado de la ficha
<b>T5</b>	Procesamiento de la ficha o flujo de información
<b>T6</b>	Domesticación tecnológica
<b>T7</b>	Manejo de políticas de uso
<b>T8</b>	Accesibilidad de internet
<b>T9</b>	Domesticación económica
<b>T10</b>	Domesticación social

<b>T11</b>	Expectativas
<b>T12</b>	Participación efectiva en el programa
<b>T13</b>	Contexto tecnológico/uso de TIC en la UT
<b>T14</b>	Control y vigilancia

*Elaboración propia*

## B) Relación de entrevistados

**Tabla n° 1. Lista de entrevistados de la Unidad Territorial de La Merced, Junín**

N°	Código de entrevista	Cargo	Años en el PNC M	Nivel educativo	Edad	Lengua materna	Estado civil
1	LAM.ENT.ES A.1	Especialista salud*	1.4	Superior (lic. enfermería)	En --	--	--
2	LAM.ENT.IN F.1	Técnico informático	3	Superior (técnica en computación informática)	en e --	--	--
3	LAM.ENT.FO R.1	Formadora de AT	1	Superior (lic. inicial)	Educ. --	--	--
4	LAM.ENT.FO R.2	Formador de AT	1.6	Superior (lic. primaria)	Educ. --	--	--
5	LAM.ENT.AT .1	Acompañante técnica 1	0.6	Superior (maestría y lic. Antropología)	32	quechua	“conviviente”
6	LAM.ENT.AT .2	Acompañante técnica 2	2,1	Superior (lic. Educación)	34	castellano	casado
7	LAM.ENT.AT .3	Acompañante técnica 3	4	Superior (maestría en educación)	41	castellano	separada
8	LAM.ENT.AT .4	Acompañante técnica 4	0.5	Superior (diplomado y lic. Educación inicial)	31	castellano	soltera
9	LAM.ENT.AT .5	Acompañante técnica 5	2	Superior (lic. Educación)	36	castellano	casada

*\*Durante la realización del trabajo de campo, ante la ausencia del Coordinador de la Unidad Territorial, el especialista en salud asumió el cargo de forma temporal.*

*Elaboración propia*

**Tabla n.º 2. Lista de entrevistados de la Unidad Territorial de Cusco, Cusco**

Nº	Código de entrevista	Cargo	Años en el PNC M	Nivel educativo	Edad	Lengua materna	Estado civil
1	CUS.ENT.CO O.1	Coordinadora	1.6	Superior (psicología)	-	--	--
2	CUS.ENT.INF .1	Técnico informático	0.6	Superior(ing. Informática de sistemas)	-	--	--
3	CUS.ENT.FO R.1	Formadora de AT	2	Superior (lic. En educación)	-	--	--
4	CUS.ENT.AT. 1	Acompañante técnica 1	1	Superior (lic. Educación inicial y primaria)	27	castellano	soltera
5	CUS.ENT.AT. 2	Acompañante técnica 2	1.8	Superior (lic. En Psicología)	34	castellano	Conviviente
6	CUS.ENT.AT. 3	Acompañante técnica 3	2	Superior (lic. Educación primaria)	39	castellano y quechua	casada
7	CUS.ENT.AT. 4	Acompañante técnica 4	1	Superior (lic. En enfermería)	37	castellano	casada
8	CUS.ENT.AT. 5	Acompañante técnica 5	4	Superior	42	castellano	Conviviente
9	CUS.ENT.AT. 6	Acompañante técnica 6	1	Superior	55	castellano y quechua	Conviviente
10	CUS.ENT.AT. 7	Acompañante técnica 7	2	Superior (lic. Educación, maestría en curso)	38	castellano	casada
11	CUS.ENT.AT. 8	Acompañante técnica 8	2	Superior (lic. Enfermería)	30	castellano	Conviviente

*Elaboración propia*

**Tabla n.º 3. Lista de entrevistados de la Sede Central, Lima.**

Nº	Código de entrevista	Cargo	Nivel educativo
1	NAC.ENT.INF. 1	Coordinadora en sistemas de información	Superior (ing. De sistemas y cursando maestría)
2	NAC.ENT.ES M.1	Especialista en seguimiento y monitoreo	Superior (ing. De sistemas)

*Elaboración propia*



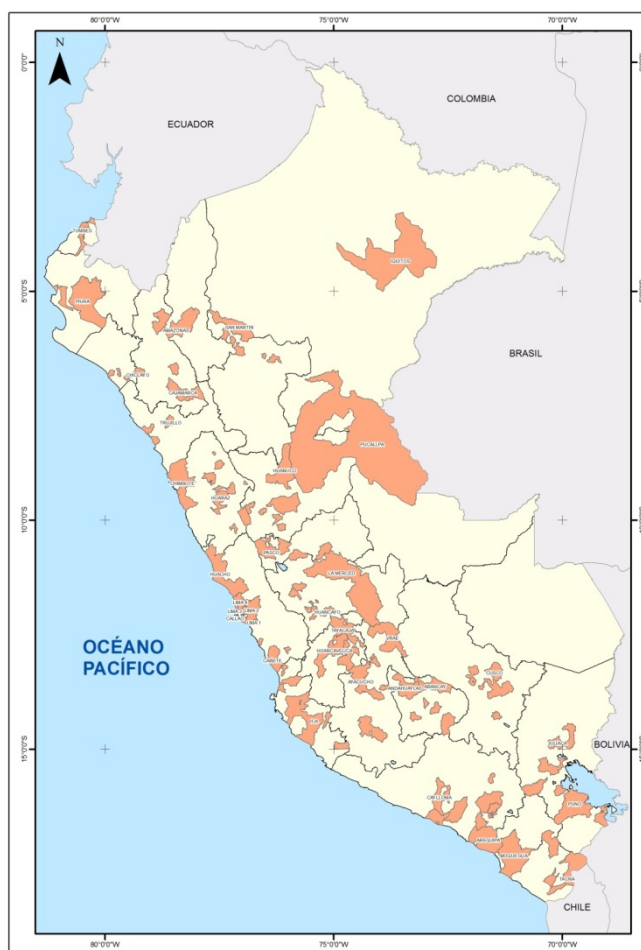
**Tabla n.º 4. Lista de Locales según tipo de Observación aplicada**

<b>Tipo de observación</b>	<b>Dpto.</b>	<b>UT*</b>	<b>Provincia</b>	<b>Distrito</b>	<b>Comité de gestión (CG)</b>	<b>Local</b>
<b>No participante (Total=1)</b>	<b>Cusco</b>	Cusco	Cusco	Lamay	Asociación de tejedoras Santa Rosa de Lamay	José María Arguedas
<b>Participante (Total=1)</b>	<b>Cusco</b>	Cusco	Cusco	Chinche ro	Virgen de Natividad	Kerapata
<b>No participante (Total=2)</b>	<b>Junín</b>	La Merced	Chanchamayo	Perené	Sangani	Los Saludables
				San Ramón	San Ramoncito neonato	Willitos 1 y 2
<b>Participante (Total=3)</b>	<b>Junín</b>	La Merced	Chanchamayo	Perené	Sangani	Santa Rosita
				San Ramón	San Ramoncito neonato	Amauta
					San Ramoncito neonato	Los niños de Bethel

*\*UT= Unidad Territorial*

*Elaboración propia*

**Anexo 2 : mapa de unidades territoriales del programa nacional cuna más en el Perú.**



*Fuente Sistema CunaNet*

*Elaboración propia.*

<b>DATOS GENERALES</b>	
<ul style="list-style-type: none"> <li>• Unidad Territorial</li> <li>• Acompañante técnico que realiza la visita</li> <li>• Fecha de visita</li> <li>• Hora inicio, hora fin</li> <li>• Comité de gestión visitado</li> <li>• Local visitado</li> </ul>	<ul style="list-style-type: none"> <li>• Total de niños inscritos en el local</li> <li>• Total de niños asistentes en el día de la visita</li> <li>• Total de niños ausentes                             <ul style="list-style-type: none"> <li>• Especificar cuál es el motivo</li> </ul> </li> <li>• Tipo de local</li> </ul>
<b>INFRAESTRUCTURA (Características del servicio)</b>	
<ul style="list-style-type: none"> <li>• ¿Se observa algún deterioro en la infraestructura del local que pone en riesgo la seguridad de los niños? (Si/No/Observaciones)</li> <li>• ¿El local está cerca de vías de alto tránsito, pozos sin tapa, canales de regadío abiertos y otros que signifiquen un riesgo para la seguridad de los niños? (Si/No/Observaciones)</li> <li>• ¿El local cuenta con el panel de red emergencia actualizado? (Si/No/Observaciones)</li> <li>• ¿El local cuenta con extintor vigente y fijado a la pared con soporte? (Si/No/Observaciones)</li> <li>• En el local, los artículos de limpieza, desinfección y objetos punzocortantes se encuentran fuera del alcance de los niños? (Si/No/Observaciones)</li> <li>• ¿Se encontró alguna bebida o alimentos calientes al alcance de los niños/as? (Si/No/Observaciones)</li> <li>• El local cuenta con rejas que separan el local de la calle y otros ambientes que no forman parte del servicio? (Si/No/Observaciones)</li> <li>• ¿El local cuenta con botiquín equipado con insumos completos y medicamentos con fecha de vencimiento vigentes y kardex actualizado? (De ser negativa la respuesta, indicar en el campo <i>observaciones</i> cual es el insumo(s) faltante(s) o desactualizados en el botiquín). (Si/No/Observaciones)</li> </ul>	
<b>SEGURIDAD DE LAS CUIDADORAS</b>	<b>SEGURIDAD DE LOS NIÑOS</b>
<ul style="list-style-type: none"> <li>• ID Cuidadora</li> <li>• Código cuidadora</li> <li>• Apellidos y nombre de la cuidadora</li> <li>• Cuidadora cumple con el ratio de niños asignados</li> <li>• Cuidadora muestra signos de inadecuada higiene personal (De ser afirmativa la respuesta indicar en el campo cual es el signo observado)</li> <li>• Cuidadora cuenta con su certificación de salud física y psicológica vigente</li> <li>• Cuidadora informa que ha observado durante el momento de higiene de genitales sus niños a cargo algún signo de presunta agresión sexual?</li> <li>• Cuidadora informa que ha observado algún niño con signos de presunto maltrato físico?</li> <li>• con maltrato</li> <li>• Cuidadora recibió la capacitación inicial, con un mínimo de 5 días incluida la formación en primeros auxilios?</li> <li>• Cuidadora cuenta con constancia de haber recibido capacitación en primeros auxilios en los últimos doce meses?</li> </ul>	<ul style="list-style-type: none"> <li>• ID niño/ ID cuidadora</li> <li>• Código niño/niña</li> <li>• Apellidos y nombres de niño/niña</li> <li>• Copia de Documento de Identidad</li> <li>• Copia de Documento de Identidad del apoderado</li> <li>• Recibo de servicios</li> <li>• Copia de tarjeta CRED</li> <li>• Carta de compromiso de padres firmada</li> <li>• Autorización firmada de recojo</li> <li>• Afiliación a seguro de salud (SIS, EsSalud, FFAA, Privado, Otro)</li> <li>• Se encuentra el niño con signo de enfermedad? De ser afirmativa la respuesta, indicar en el campo el signo detectado</li> <li>• Se encuentra el niño con señales de haber sufrido algún accidente? (De ser afirmativa la respuesta, indicar en el campo cual es el detectado)</li> <li>• Observa al niño retraído, comportamiento agresivo, que no permite ser tocado o que no socializa? (De ser afirmativa...)</li> <li>• El niño muestra signos de inadecuada higiene personal (De ser afirmativa...)</li> </ul>

<ul style="list-style-type: none"> <li>• En su opinión, la cuidadora brinda una Atención Integral y de calidad a las niñas y niños que se encuentran en el local? (De ser negativa la respuesta indicar en el campo cual es la debilidad de la cuidadora que no permite una atención de calidad al niño/a</li> </ul>	El niño presenta algún tipo de discapacidad o enfermedad crónica o congénita que necesita una atención especial? (De ser afirmativa...)
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