



UNIFIED SOCIAL ASSISTANCE SYSTEM CENSUS (‘SUAS CENSUS’)

Creation of the tool: background

The Unified Social Assistance System (SUAS) is a government-run system that organizes and finances social assistance services in Brazil, based on a participatory and decentralized management model. Launched in 2005, the purpose of the system is to ensure social protection for families and individuals in situations of social vulnerability.

From 2004 to 2007, the Ministry of Social Development and Fight against Hunger (MDS) encouraged states and municipalities to join SUAS, and allocated substantial funds for them to expand their social assistance services. 98% of Brazil’s municipalities had signed up to it by 2007.

The rapid expansion of SUAS involved strengthening information production and monitoring as a basis for making decisions on the system’s future development. Before 2007, information on the number, type and quality of the social assistance services available did not exist. **The urgent need to develop a scheme for tracking and monitoring the effectiveness of federal resources and the quality of social assistance services provided a catalyst for launching the SUAS Census.**

What is the SUAS Census?

The SUAS Census is a data collection process based on an online form to be completed by social assistance departments and councils throughout the country. The Census contains data on social assistance management, physical structures, human resources and the services and benefits provided by the various social assistance outlets in Brazil.¹

The annual SUAS Census has been carried out jointly since 2007 by the National Secretariat for Social Assistance (SNAS) and the MDS’s Secretariat for Evaluation and Information Management (SAGI). While SAGI was responsible for designing tools for the collection, analysis, processing and dissemination of data, the SNAS took on the task of defining the main issues and selecting the subjects to be tackled in the questionnaires, as well as mobilizing state and municipal stakeholders to take appropriate action.

By making the Census a priority in the MDS agenda it was possible to engage local and state partners in the process, leading to comprehensive coverage and reliable outcomes being achieved in record time.

The SUAS Census was established at the outset with limited access to data on social assistance facilities in place at the time. In reality it was necessary to create a data collection strategy from zero, given that in 2006 even the exact locations of the Reference Center for Social Assistance (CRAS)² were unknown. The only information available was the number of assistance facilities in individual municipalities. Surveys needed to be undertaken of existing social assistance infrastructure, the working conditions of CRAS professionals and, importantly, to determine the quantity and type of services offered by the centers.

1 Details of the SUAS Census can be found at: <http://www.mds.gov.br/sagi>. In the “SUAS Management ” window all the censuses and applications developed from them can be browsed.

2 The CRAS are public social assistance centers charged with organizing and providing Basic Social Protection to families and individuals in Brazil’s municipalities.

A preliminary task was to discover the reasons why some of the centers were not functioning despite receiving funds allocated by central government. This led to a baseline being established for the overall census process.

The process of building the SUAS Census reached maturity in 2010 with the introduction of the new questionnaires for collecting information on social assistance management bodies, councils and private assistance entities, as shown in Table 1.

Table 1: SUAS Census questionnaires applied and completed

Questionnaire type	Number of questionnaires completed								
	2007	2008	2009	2010	2011	2012	2013	2014	2015*
Municipal Social Assistance Management Agencies				5.488	5.409	5.315	5.442	5.520	x
State and District Social Assistance Management Agencies				27	26	27	26	26	x
Municipal Social Assistance Councils (CMAS)				5.246	5.237	5.197	5.269	5.366	x
State and Federal District Social Assistance Councils				27	27	27	26	26	x
Private Social Assistance Entities (Covenanted)				9.398	10.265				
Social Assistance Reference Centers (CRAS)	4.195	5.142	5.798	6.801	7.480	7.725	7.883	8.088	x
Specialized Social Assistance Reference Centers (CREAS)		982	1.224	1.590	2.109	2.167	2.249	2.372	x
Specialized Reference Centers for Street People (Centros POP)						105	131	215	x
Reception Centers (<i>Centros de Acolhimento</i>) for different target audiences						4.360	4.423	5.184	x
Centers offering Sociability and Family Ties-strengthening Services (except CRAS)								7.882	x
Special Social Protection Service for Handicapped and Elderly People and their Families								7.882	x

* Na época da elaboração deste texto, o Censo SUAS 2015 estava em processo de coleta de dados.

99% of the municipalities completed 28,519 questionnaires in 2010. The number of participating entities and completed questionnaires increased year-on-year: **in 2014 some 35,000 questionnaires were collected and the databases expanded to contain a total of over 4000 variables.** This resulted in improved social assistance decision-making processes, an expanded social assistance network and scaled-up coverage. The indicators based on the SUAS Census reinforced the planning processes aimed at improved management and social control of the SUAS.

How the SUAS Census works

The online SUAS Census system is rolled out once a year to state and municipal managers and those responsible for social assistance councils and private entities. The forms have to be completed online with the required information. An average deadline of two months (in the second half of the year) is allowed for respondents to fill out the questionnaires.

After the incoming data is checked, systematized and analyzed by MDS, it is used for planning future activities and monitoring progress at the three levels of government. Once the data is analyzed, the MDS begins the task of reviewing the questionnaires, comparing them with results from previous years and applying the data to social assistance issues on the current MDS agenda.

It is important to note that data collection for the SUAS Census is a joint task, undertaken by various MDS departments and municipal and state managers. The exercise is not confined to straightforward online form-filling; it involves a collective effort to construct, monitor and distribute data with a view to enhancing the entire spectrum of social assistance policy.

The questionnaires are organized in thematic blocks intended to reveal details of management and social control, the physical structure of the various assistance services, the characteristics of the target public and the quantity and type of human resources available. The questionnaire topics are adapted every year to reflect social assistance policy core priorities. The entire process is open, allowing the insertion of new questions, and indicators are generated for comparisons to be made at different stages of the process, thereby enabling operators to track policy and services evolution over time.

Following the data collection stage, synthetic and analytical reports are prepared to inform MDS decisions. **The information and indicators resulting from SUAS Census data have made an important contribution to the negotiations with states and municipalities concerning resources-sharing and their commitment to improving the quality of social assistance services.**

When the online questionnaires are launched, these are simultaneously tracked via cellphone or computer to ensure that they are completed, and to alert managers in the event of any delays.

The 2014 SUAS Census assembled data from 99% of municipal social assistance units, and from 96% of the state agencies. Table 1 on the previous page shows the SUAS Census data from 2007 to 2014. The Census revealed the number of stakeholders that had completed the questionnaires as well as the amount of data available for strengthening social assistance policy actions in Brazil.

The information management tools are developed internally at SAGI by a multidisciplinary team of programmers, statisticians, engineers and other professionals. The SNAS team is also multidisciplinary, containing sociologists, social workers, economists, psychologists and others. **In 2010, 42 professionals in the MDS were directly involved in the SUAS Census exercise. Over the years it became necessary to focus on the critical points of the online data collection process, such as the preparation of questions and the construction and monitoring of the actual questionnaire. While the social assistance managers are responsible for framing the questions, the SUAS Census programming work is currently done by only three people**⁴. Meanwhile, the number of people engaged in preparing the questionnaires and analyzing the assembled data has increased every year due to the growing number of questionnaires and general interest in the Census which, given its improved consistency, is now acknowledged as a genuine strategic asset by SUAS management.

The development and implementation of the SUAS Census is done with MDS human, financial and technological resources. The Census has no specific budgetary allocation: it is an ongoing activity forming an integral part of the MDS workload.

In 2014, the SUAS Census mobilized over 35,000 employees of the social care network in the municipal and state governments, councils and private sector. Data visualization tools and access to the SUAS Census application make real-time monitoring of questionnaires possible, with the federal government team identifying issues and working closely with the states to mobilize and guide staff, expand adhesion to the Census and improve the quality of the data provided by recipients of the questionnaires. Similar efforts are made to encourage the state authorities to do the same vis-à-vis the municipal authorities in their domain. SUAS Census monitoring activities have clearly aided the planned growth and improvement of social assistance services in general.

In 2014, the SUAS Census recorded the existence of 8088 CRAS, 2372 CREAS, 215 POP Centers, 5184 Reception Centers and 7882 'Sociability' Centers (*Centros de Convivência*)⁵. The value of the SUAS Census, acknowledged as a tool for enhancing the quality of SUAS management, received in 2011 one of the awards in the Innovation in Federal Public Administration Competition organized by the National School of Public Administration (ENAP)⁶.

4 When the SUAS was first introduced many people discussed the initiative and provided feedback. At present only those who actually work with the SUAS are involved in the Census.

5 The Social Assistance Reference Center (CRAS) is the gateway to social assistance in Brazil. It is a public place, located in an area of social vulnerability, where basic social assistance services are offered. The Specialized Reference Center for Social Assistance (CREAS) provides services to families and people who are at social risk or have had their rights violated. The Specialized Reference Centers for Homeless People (*Centros POP*) arrange individual consultations, workshops and socialization activities for people living on the streets. The Reception Centers (*Unidades de Acolhimento*) provide protection and temporary abode to abandoned individuals and families and to those suffering violation of their rights. The 'Sociability' Centers (*Centros de Convivência*) organize cultural and sports activities aimed at strengthening family and community relationships.

6 Since 1996, the Awards for Innovation in Federal Public Management have been sponsored annually by ENAP, in partnership with the Ministry of Planning, Budget and Management. The awards reward teams of public employees that introduce innovations to everyday activities and generate improvements in the management of public and political organizations - thus contributing to scaling up the quality of public services and increasing the effectiveness of the State's responses to society's demands.

The tool-building process

One of the challenges faced by SAGI is to ensure that all the stakeholders — states, municipalities, councils and private entities — make good use of the information collected in the various censuses for expanding and scaling up their social assistance services.

The initial information management challenge facing the originators of the SUAS Census was to place a limit on the questions that managers wished to include in the data collection tool. While managers wanted to know everything, they had little idea of what to do with the responses. Once the number of questions was reduced, a basic online tool was produced for monitoring the CRAS (the ‘CRAS Monitoring Questionnaire’).

Figure 1 shows the print version produced during development of the tool. SAGI subsequently began to work with the idea of structuring data to store the information contained in the questionnaire, convinced that a well-constructed database was essential for ensuring efficient data recovery. In line with relational databases theory, a procedure was introduced for standardizing the collected data consisting of a step-by-step approach to enable consistent storage, rapid access to database material, reduction of excess data and minimum inconsistencies (*Data Standardization, 2013*).

Figure 1: Print version of the CRAS Monitoring Questionnaire

The SUAS Census questionnaire was divided into data related to the social assistance units, human resources, management, etc. Figure 2 shows one of the drafts prepared during the development process. Much time was devoted to analyzing the questionnaire in order to evaluate the questions and, in particular, to display them in tabular form.

It was necessary to create an *Entity and Interface Framework* to identify the various entities involved in the questionnaire and to map their relationships with one another. It was decided, for example, that CRAS would be defined as an entity with its own special markers such as address, e-mail, municipality, zipcode, state, telephone, GPS etc. Another entity consisted of the individual members of the CRAS TEAM, denoted by name, date of birth, CPF⁸ and job description. The relationship between the CRAS and the TEAM was defined as 1:N (one to N), meaning that in a particular CRAS the team would consist of “N” number of members. Details would therefore be available of the number of entities and the relationships between them. By the end of the process, each entity would be entered in a table in the database.

Figure 2: Standardization of the CRAS Monitoring Questionnaire (May 2007)



8 The CPF (Register of Physical Persons) is a registry run by the Federal Tax Office. Any individual, regardless of age or nationality, is allowed to register once only. Individual CPF holders are identified by a card containing 11 numbers plus a confirmatory digit.

Once the basic model had been prepared, the result was presented to those responsible for the project. The wording of the questions and the order of presentation underwent some changes, with some questions being suppressed and others added.

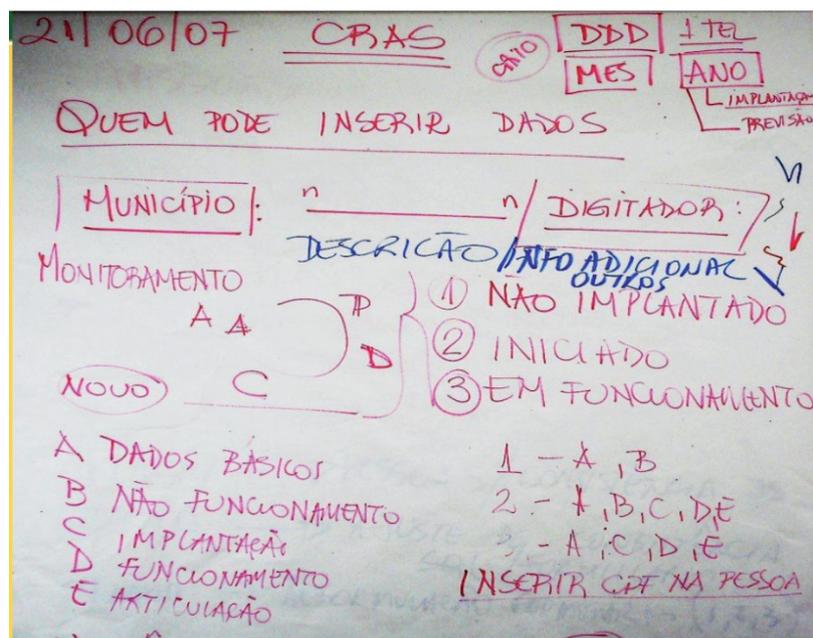
The protocol taught in software engineering and databank schools (relational data model, entity relationship diagrams, data logic models, case and uses diagrams) did not provide the necessary flexibility for the SUAS Census. The first effort, (Figure 2) was discarded after this reality check, and the strategy for storing the questions in the CRAS Monitoring Questionnaire had to be altered to take account of the frequent amendments requested on the questionnaires by social assistance managers.

After much discussion and thought on the best way to store data from a constantly discussed and adjusted data-collection tool, it was eventually decided that the problem should be resolved by restricting the process basically to storing a set of questions and answers. In other words, to simply use a data storage structure confined to a number of tables, with CRAS minimally defined (municipality, address, e-mail, telephone) and an ITEM_QUESTION table containing five fields, as shown in Table 2 and Figure 3.

Table 2: ITEM_QUESTION field for storing answers

Field	Description
id_cas	Unique CRAS identification
Question	Question for response
Answer	Response given by user
User	User replying to the question
data_reg	Date response recorded

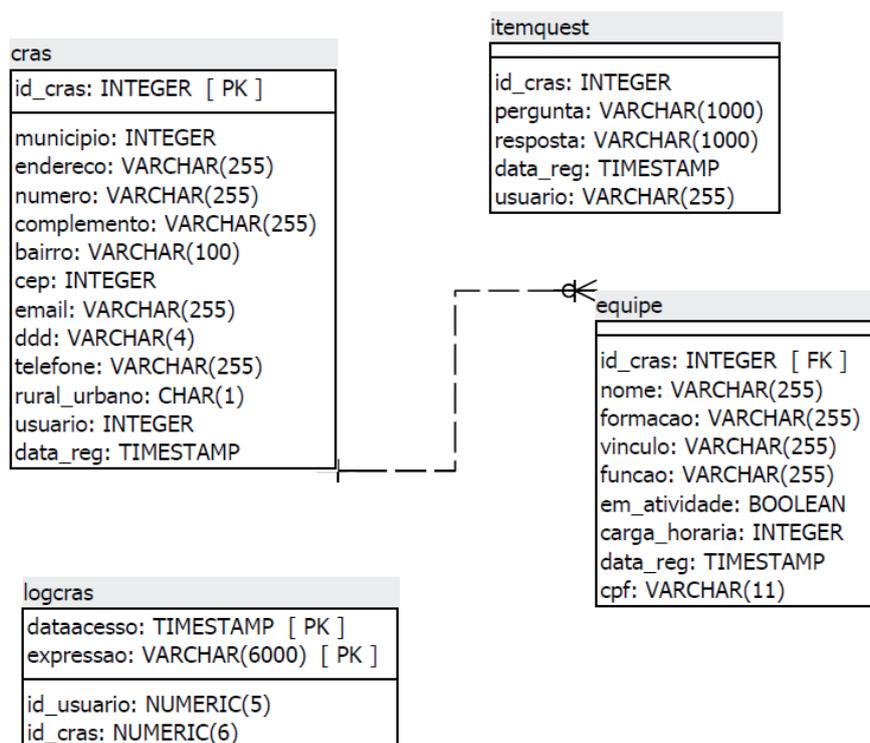
Figure 3: Solution adopted for storing the CRAS Monitoring Questionnaire structure



This simple approach made the task much easier since, as discussion proceeded on the contents of the questionnaire, it was possible simultaneously to continue to design the structure of the data collection tool. As with building a house, while the type of house, decoration, etc was being decided, another team would begin the actual construction work. The question was: how was it possible to start building a house without defining a proper plan? In order to create the basic structure of the house, regardless of its type, it is vital to have cement, bricks, reinforcing steel, etc.

Steps for building an information storage and retrieval structure regardless of the type of question and the number of responses. While the wording of the questions and order of responses can be defined in discussion, the data structure needs to be capable of accepting amendments and retrieving data inserted by municipal and state managers (Figure 4).

Figure 4: Entities and Relationships used in CRAS 2007



With regard to questions 1 and 10 in the CRAS 2007 Monitoring Questionnaire (Figure 5), its storage medium is shown in Figure 6: in the “question” field a keyword is stored representing the question, while the “answer” field contains the response that the user has entered on the online form. This solution is not recommended by databank design specialists since it fails to address the problem of data standardization and repeatedly stores texts that could be displayed better in code.

However, this approach can be justified by the need to meet the substantial demands for amendments to the questions and answers from users during the SUAS Census exercise. For question 1 “Indicate the CRAS funding sources,” the keyword used is “funding source” and in question 10 “Indicate the items in CRAS” the keyword is “existing_ items”.

Figure 5 - Part of the CRAS 2007 Monitoring Questionnaire

1	() Check the funding sources of this CRAS:
1.	() Federal Government
2.	() State Government
3.	() Municipal Government
.....	
10.	Check the amenities available in the CRAS:
1.	() Reception area
2.	() Interview room for individual sessions
3.	() Room for family group meetings
4.	() Room for technical team and coordination staff
5.	() Restroom
6.	() Kitchen
7.	() Stockroom
8.	() Space for socio-educational and conviviality groups
9.	() Access facilities for elderly and handicapped people
10.	() Telephone
11.	() Computer
12.	() Internet access

Figure 6: Example of use of the table

id_cras integer	pergunta character varying(255)	resposta character varying(255)	data_reg timestamp with time zone
1	fonte_financeamento	federal	2007-07-25 12:47:27.96497-
2	fonte_financeamento	municipal	2007-07-25 12:47:27.919281
3	levantamento_vulnerabilidade	Dados do Cadastro Único	2007-07-25 12:47:27.972473
4	levantamento_vulnerabilidade	Dados sobre os beneficiários do BPC	2007-07-25 12:47:28.029095
5	itens_existentes	Local para recepção	2007-07-25 12:47:28.089359
6	itens_existentes	Sala para a equipe técnica e coordenação	2007-07-25 12:47:28.161888
7	itens_existentes	Banheiro	2007-07-25 12:47:28.225407
8	itens_existentes	Telefone	2007-07-25 12:47:28.27968-
9	itens_existentes	Computador	2007-07-25 12:47:28.334065
10	itens_existentes	Acesso a Internet	2007-07-25 12:47:28.388244
11	comunidades_especificas	Atende outras populações tradicionais e específicas	2007-07-25 12:47:28.448535
12	vigilancia_social	familias em descumprimento de condicionalidades do Bolsa Família	2007-07-25 12:47:28.525297
13	vigilancia_social	indivíduos sem documentação civil	2007-07-25 12:47:28.576613
14	vigilancia_social	familias com pessoa idosa dependente beneficiária do BPC	2007-07-25 12:47:28.618806
15	vigilancia_social	familias com pessoa deficiente beneficiária do BPC	2007-07-25 12:47:28.679085
16	vigilancia_social	familias com ocorrência de fragilização ou rompimento de vínculo	2007-07-25 12:47:28.733473
17	vigilancia_social	rede de serviços locais (assistência social, educação, saúde, etc)	2007-07-25 12:47:28.858092
18	atividades_realizadas	Recepção e acolhida	2007-07-25 12:47:28.912256
19	atividades_realizadas	Reuniões	2007-07-25 12:47:28.954507
20	atividades_realizadas	Acompanhamento de familias	2007-07-25 12:47:29.008644
21	atividades_realizadas	Acompanhamento de individuos	2007-07-25 12:47:29.062878
22	atividades_realizadas	Visitas Domiciliares	2007-07-25 12:47:29.117214
23	atividades_realizadas	Grupo/oficina de convivência e atividades sócio-educativas com fam	2007-07-25 12:47:29.1894-0
24	atividades_realizadas	Palestras	2007-07-25 12:47:29.249675
25	atividades_realizadas	Ações de capacitação e de inserção produtiva	2007-07-25 12:47:29.304065
26	atividades_realizadas	Encaminhamento de familias ou individuos	2007-07-25 12:47:29.373458
27	atividades_realizadas	Encaminhamento para inserção de familias no Cadastro Único	2007-07-25 12:47:29.453202
28	atividades_realizadas	Inserção de familias no Cadastro Único	2007-07-25 12:47:29.501526
29	atividades_realizadas	Orientação/accompanhamento para inserção do BPC	2007-07-25 12:47:29.561588
30	articulacao em rede	Demais unidades da Rede de Proteção Social Básica	2007-07-25 12:47:29.603824

A further important task was to define the way of registering users authorized to enter CRAS data in each of Brazil's 5,570 municipalities. Based on the idea that the process should be totally decentralized, a mechanism was created for the user to access the system by completing a registration form, after which authorization would be confirmed through exchange of e-mails. A number of problems have now been resolved to allow the systems to transmit e-mails: previously the MDS IT department did not accept that other coordination units could develop computer systems, and prohibited SAGI from accessing the e-mail service. After much technical and political argument, authorization and e-mail access issues were however finally obtained.

A week before its launch, it was determined that the data collection instrument should be incorporated into another registry – the CADSUAS/SUASWEB (Unified Social Assistance System Registry). At the time, the SAGI development team was unaware of the existence of this registry. It was necessary therefore to find one of the programmers responsible for the development of the CADSUAS, who foresaw the possibility of consulting the system's databank in the Database Management System (SGBD) ORACLE, where it was deemed possible to authorize users to gain access to the questionnaire. The questionnaires were stored in the SGBD POSTGRESQL, which made it necessary to consult users in the ORACLE databank. After two intensive working days it became possible to enable users registered in the CADSUAS to access the questionnaires. The idea of registering and using e-mail⁹ for communication by users was therefore discarded. Regardless of these unforeseen changes, the CRAS Monitoring Questionnaire was successfully launched on time. The episode simply illustrates the importance of a flexible IT solution in the government sphere, where everything can change without warning.

In the first version, 4,182 CRAS were registered in 3,151 municipalities, with 3,947 in operation and 235 under construction. The numbers achieved were not entirely due to the online data collection tool, but also to good coordination and mobilization of the individuals involved in the process. **In order to encourage more stakeholders to complete the online questionnaire, an official resolution was published in January 2008 ruling that the fixed monthly baseline payments to municipal authorities would be suspended if they failed to return the questionnaires.**¹⁰

It was necessary from the start to conduct intensive monitoring of the data collection process, since this did not employ traditional databank concepts such as the use of the entity relational approach. Traditionally, each entity generates a table in the SGBD (producing a large number of tables), but the adopted solution in the MDS utilized only 3 main tables and one auxiliary table to record activities. **There was no guarantee that this solution would work, but it was certainly viable in an institutional context. The questions and answers change almost daily, and the structure that was established provides enough flexibility to absorb these changes.** In order to ensure that the adopted code correctly recorded the data entered by managers, a system-variable monitor display was designed to ensure that all respondents had completed every field on the questionnaire.

9 On the other hand, adhesion to the SUAS Census was less problematic since it was not necessary to generate passwords and users.

10 The fixed baselines are the amounts of co-financing funds allocated by the federal government to cover the local costs of on-going SUAS social assistance services.

Lessons learned

After the creation of the SUAS Census, the Brazilian social assistance network improved substantially from the point of view of decision-taking, thus making it viable to expand the network and increase the coverage of social assistance services. Table 3 summarizes the main obstacles encountered and the solutions adopted in the SUAS Census:

Table 3: Lessons learned during the Census SUAS Census development process

OBSTACLES	SOLUTIONS
In 2007 the use of electronic devices for management and decision-taking was still in its infancy among Social Assistance Policy operators.	Development of simple user-friendly tools in order to encourage their use by those unfamiliar with feeding electronic data systems.
Many concepts and definitions of the social assistance services were not duly consolidated and disseminated, which made understanding of the questions in the questionnaires difficult.	Online and telephonic support to users at the questionnaire completion stage; availability of instruction manuals for helping people to complete the questionnaires; the use of an online dictionary coupled with the online questionnaire, and containing explanations of each of the variables collected.
Since the SUAS Census intended to collect data from all the municipalities with CRAS or CREAS, success depended largely on the municipalities adhering voluntarily to the scheme.	Design of a participatory methodology: undertaking the census is always preceded by meetings with state and municipal representatives - occasions on which criticism and suggestions are received and procedures agreed upon; monthly fixed baseline payments suspended for municipalities receiving co-financing and which fail to respond to the questionnaires; dissemination to the managers at the three levels of government of the results of the SUAS Census through publications, visualizers, tabulators, maps, indicators etc
The protocol taught in databank and software engineering schools lacked the necessary flexibility for the SUAS Census.	Creation of a simplified method to store data from a data collection tool that is under constant discussion and subject to adjustment.

References

BRAZIL. Ministry of Social Development and Fight against Hunger (MDS). O Censo SUAS como processo de aprimoramento e institucionalização da Política de Assistência Social no Brasil. In: *AÇÕES PREMIADAS NO 160 CONCURSO INOVAÇÃO NA GESTÃO PÚBLICA FEDERAL*. Brasília: ENAP, 2011. ISBN: 978-85-256-0067-7.

NAKASHIMA, Caio; FARIAS, Luis Otavio Pires. O Censo SUAS como processo de aprimoramento e institucionalização da Política de Assistência Social no Brasil. In: *VI SEMINÁRIO DA REDE BRASILEIRA DE MONITORAMENTO E AVALIAÇÃO*. Porto Alegre, 2014.