Current Situation of Sovereignty and Food and Nutrition Security in eleven communities in the municipality of El Sauce, Province of León, Nicaragua in the period 2015-2016

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SUMMARY

This research project unveils results of fieldwork and its main functions were directed to institutional strengthening to promote a governance process of Sovereignty, Food Security and Nutrition locally. The communities assigned were Los Panales (Nueva Esperanza hamlets, Nueva España), Los Loros (all the hamlets), Santa Bárbara, (Agua Fría hamlets), Guacucal (Santa Lucía hamlets), Sálales (Lasla and las Cigarreras hamlets), San Antonio Valley (El Tempisque hamlets), Los Altos de Ocotal (Buena Vista hamlets, Guayabo, Las Minitas and Cerro Colorado); all hamlets of Las Mercedes, Sábana Grande, Los Tololos and San Ramón in most of the villages of La Palma, St. Lucia, and partial monitoring was provided in partial communities in the municipality of El Sauce, department of León.

The main research results were based on the axis of "Inter-institutional coordination when implement a mechanism that helps reduce malnutrition and build Sovereignty, Food Security and Nutrition at a local level in eleven communities in the municipality of El Sauce", these were:

- Strengthening of municipal governance in Sovereignty, Food Security and Nutrition as a result of inter-institutional actions promoted at a local level.
- Institutional strengthening on the use of basic tools and management mechanisms at the local level towards Sovereignty, Food Security and Nutrition.
- Accompanying of the processes executed on the welfare of families, their life quality and sustainable human development.

INTRODUCTION

The municipality of El Sauce, is characterized by a great socioeconomic, cultural and environmental diversity, represented in different ethnic groups: indigenous and mestizos; communities that thanks to climate, biological and geographical wealth of the municipality, have expressed stay nutritionally balanced, when they have nurtured within their own cultural patterns. However, this diet has proved to be somewhat unbalanced, as the model designed by the government in the National Human Development Plan, has a fundamental line that is Sovereignty, Food Security and Nutrition, which is partly helping in nutrition.

In this direction, the interest of the research was focused on the obvious need for more comprehensive forms of assessment and planning of sovereignty, food security and nutrition, therefore, it is proposed as a general objective: to analyze the current state of the sovereignty, security food and nutrition of eleven communities in the municipality of El Sauce for its validation, adjustment and approval. To fulfill that purpose, the following specific objectives were developed: Describe the socioeconomic characteristics of the inhabitants of the eleven studied communities in the municipality of El Sauce, analyze the availability and consumption of rural families of the eleven communities and assess the ways of access to water, land and technical training for food production in the studied communities, and finally, based on the diagnosis made, design in a participatory manner, an action plan aimed at its improvement and strengthening.

This work let identify in a more precisely way, some additional factors to the structural problems that small farmers deal with. My intention is to put in evidence the factors of cultural nature, social, educational and information to help identify some variables that the development support programs, who want to drive this population to sustainable livelihoods, could take into account.

METHODOLOGY

The methodology proposal consists of a series of tools and complementary activities which seek to take advantage of the human, technical and bibliographic resources available in rural communities studied to determine the current status of its sovereignty, food security and nutrition, so that this diagnosis constitutes a solid, accurate and clear basis for defining the improvement plan, achievement and sustainability corresponding to each community that implement this methodology.

The methodological design raises the approach, type of research, population and sample, as well as the explanation of empirical and theoretical methods used. The data will be processed in Statistical Package for Social Science (SPSS V. 23 in Spanish, Estadísticas descriptivas, ANDEVA, MANOVA, Correlación de Spearman, Análisis Univariados y Multivariados).

Measuring of food insecurity includes: **a)** the quantitative component of having enough food; **b)** the qualitative aspect, concerning the type and diversity of food; **c)** the psychological element of anxiety for privation or limited selection of food, and **d)** the social aspect, by accepted standards for the purchase of food. An additional aspect is related to seasonality and duration of periods of food insecurity.

The methodologies or methodological resources are guidelines that show us the way used to the tasks and acting during the course of the research project. In this case, the issue SSAN was

applied in eleven communities of the municipality El Sauce through work-study by the Institute of Economic and Social Research (INIES-UNAN-Managua).

Next, the methods used are defined according to required product:

a. Experience in Communities Los Panales, Los Loros, Santa Barbara, Guacucal, Salales,
Valle San Antonio, Los Altos de Ocotal, Las Mercedes, Sabana Grande, Los Tololos, San
Ramon, La Palma and Santa Lucia, municipality of El Sauce, Province of León.

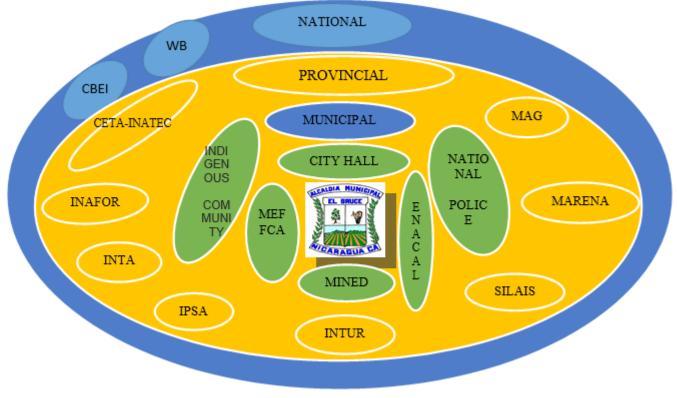
For development of the lived experience, learning cycle phases which are explained below were performed: experience, observation and reflection, conceptualization and implementation: These phases are summarized in two steps: first, the experience lived with the inhabitants of the studied communities, as well as the Production Cabinet of the City Hall and second, the analysis and understanding of those elements that are part of the context and reality of the experience itself.

Experience: consisted of seven days experiencing reality in the eleven communities. Two communities per day.

- The characteristics of this experience: The families were selected by the production cabinet. Including families in vulnerability in which the presence of an outsider does not mean economic or social overexertion.
- The family members should be recognized by the community as people with values and good conduct.
- The families had kids.
- The families were clearly informed about the objectives of the experience to not change their work or food routine.
- The experience days were normal working days. Holidays or weekends were not considered appropriate since the family routine is altered in those days.
- The rules of experience were explained which included behaviors to relate to family, not bringing food and clothing and also the bedclothes should be the minimum necessary.
- The first day the participants had to present themselves to communities with the support of their senior technician (in this case were teachers CETA-Arlen Siu / INATEC, who were in charge of supervision) and the municipal bond of the Production Cabinet of the City.
- While staying with families daily activities were performed, conditions and relations established between its members were observed. In general, we tried to know, live and understand the determinants of InSAN or those aspects that could limit the optimum development of families.
- We coolaborated with families in everyday activities to develop some hygiene practices, proper water management or food preparation with local resources, among others. As long as this does not generate additional costs or a bad relationship with families, but a learning experience for them.
- It was managed and implemented a system of drip irrigation in several farms of producers in the Salales community together with technitians from the Nicaraguan Institute of Agricultural

Technology (INTA) as a contribution to farming families and ensure that this would be of help during drought problems.

b. Mapping of actors

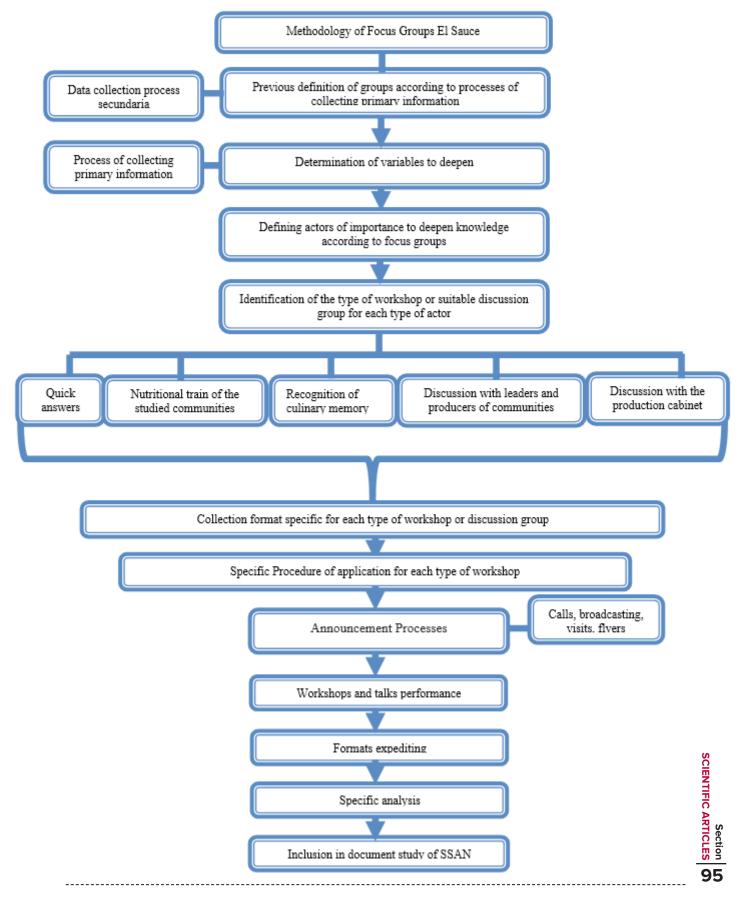


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Actors mapping, a tool to identify coordinating bodies

The mapping of actors was developed in the framework of the actions executed from the municipality of El Sauce. Actors with presence in the city and those who had influence through social projects were identified. Plot construction allowed visualization of instances with whom later coordination of local government representatives was made (such as the Cabinet of Production), assessed the resources available to the municipality in terms of social incidence, which varied over the lapse 2015 to 2016 that is running.





RESULTS

Based on the analysis and interpretation of the results and their discussion, it was reached the following results:

- The male was the one that prevailed in the heads of households, with 79.1%. They are mainly men, who are in charge of some key activities within the family. Among them: the field work and the scarce resources to bring their families. The development of these communities is strongly affected by the poor school (education) level of parents, this being 40% illiterate, 49% with primary education, secondary level 10% and, finally, the college education with 1%; Moreover, wages are precarious and are between C\$ 2,500 and C\$ 4,000 per month. Although 97.4% have an active employment status.
- 2. The main way that families acquire their food is by purchasing them at a rate of 80% and only 46.7% grow their food, mainly corn, sorghum and beans. Rice is grown hardly for this is a dry (tropical) area. New components were determined when applying Principal Component Analysis (PCA) to the pattern of weekly consumption of household food. After analyzing their factor loadings, the little food consumption on average was observed, both groups tuber carbohydrates 0,64kg, commodities 0,74kg, vegetable, vegetables and fruits 1,12kg; as proteins: 1,32kg dairy-meat, fish 0,48kg, 0,48kg birds, eggs 0,52kg
- The main productive forms of these communities are affected by drought, lack of financial support to the producer and therefore the low attendance of specialized institutions in the field. This is the sequel reflecting low production in corn 15.2 kg, beans and sorghum 20,6kg 27,85 kg.
- 4. Families of the eleven studied communities, despite the many social factors, meet good standards of food preparation, such as hygiene of the products. The quality of water consumed by households were also determined. 74.2% in good condition; 24.2% Regular and 1.7% bad water. 50.8% have no access to electricity, while 49.2% do have access; all of these resources are links needed to raise agricultural productivity and strengthen SSAN of rural families.
- 5. According to the characteristics of latrines in the eleven studied communities, 75.8% have Latrines with treatment and 21.7% with untreated latrines. It is observed that a good percentage maintains adequate tidiness in their latrines.
- 6. One of the main limitations that the eleven studied communities have to increase production is 75.5% of unstable weather, and the lack of water for irrigation in 69.3%. On the other hand, pests are shown 57.1% in the field; and another factor that is important is the lack of credit with 42.4% in the families, which is one of the main problems worrying producers.
- 7. COMUSSAN will allow the creation of an atmosphere of consensus among industry groups, exchange of experiences between different local actors working towards the SSAN.
- 8. Work towards strengthening the promotion spaces of SSAN is essential, because through this you can identify the effectiveness and efficiency of the actions taken from these fields.

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