

# SUSTAINABLE SCHOOLS



## Conceptual and methodological guidelines

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Organización de las Naciones  
Unidas para la Alimentación  
y la Agricultura



FNDE  
Fundo Nacional  
de Desenvolvimento  
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## GLOSSARY AND ACRONYMS

ABC	Brazilian Cooperation Agency
ESG	Educational school gardens
FAO	Food and Agriculture Organization
FAO-RLC	FAO Regional Office for Latin America and the Caribbean
FF	Family farming
FNDE	National Fund for the Development of Education in Brazil
FNE	Food and nutrition education
FNP	Food and Nutrition Plan
FNS	Food and nutrition security
HFLACI	Hunger Free Latin America and the Caribbean Initiative
LAC	Latin America and the Caribbean
LTC	Local Technical Committee
MEC	Ministry of Education of Brazil
NGO	Non-Governmental Organization
NSFP	National School Feeding Program
NTC	National Technical Committee
PNAE	National School Feeding Program
SFC	School Feeding Committees
SFP	School Feeding Program
SNSS	Study of the Nutritional Status of Students
SS	Sustainable school
WFP	World Food Programme

## PRESENTATION

The first version of this document was prepared in 2014, as part of the project *Strengthening School Feeding Programs in the Framework of the Hunger-Free Latin America and the Caribbean Initiative (HFLACI) 2025, (GCP/RLA/180/BRA)* in order to systematize the methodology of the Sustainable Schools (SS), which had been created by the Project to be implemented in the countries. The second version of 2017, in addition to updating data, inserted guidelines for preparing the Food and Nutrition Plan (FNP).

This third version of the document aims to update concepts and information for the implementation of SS, as well as to adapt them to the project *Consolidation of School Feeding Programs for Latin America and the Caribbean (GCP/RLA/223/BRA)*, implemented from 2018 onwards, as a continuation of the actions initiated by the previous project in the Region.

In this material, readers will be able to be familiar with the history of the implementation of SS in various countries and the steps to develop its methodology, as well as with concepts, guidelines, and components of the practical model of SS, which has the potential to generate knowledge, produce interactions among different levels of government, empower technicians and the school community, and promote the sustainability of an entire school feeding program (SFP) at national level.

This methodology has become a powerful strategy to promote changes. It has been implemented in 12 countries, comprising 51 states (departments), 152 municipalities, and 3.193 schools, with the participation of approximately 283.000 students and more than 1.240 families of local producers (family farmers). The data below show the situation in 2017, the last year in which a systematic and direct monitoring by the Technical Cooperation Project in Brazil and the Food and Agriculture Organization (FAO) with governments was done. Since, then, there have been reports that countries have made progress on these numbers, therefore, the numbers presented here might have suffered some variations. However, more important than the numbers themselves, we consider:

- a) The paradigm shift in the school feeding vision that SS have promoted;
- b) The initially adopted concepts and those that were built and rebuilt with the countries around the implementation of this methodology, and which have been a reference for many other projects of the countries and FAO; The initially adopted concepts and those that were built and rebuilt with the countries in order to implement this methodology have been a reference for many other projects, not only in different countries but on FAO;
- c) The concrete practice of a sustainable SFP that this methodology has allowed to offer to many national, state (departmental) and municipal governments, the school community, and especially to students;
- d) The various and valuable documents developed about this methodology, such as synthesis and report materials;
- e) The impact in the drawing up and passing of the recently approved school feeding laws; and
- f) Mainly, the improvement of the quality of SFP in many countries, based on the knowledge built from these more than three thousand SS.

SUSTAINABLE SCHOOLS - UNTIL 2017										
Country	State (Department)	Municipality	Schools	Students	ESG*	Family farming		Community Involvement		
						Individual	Associated	Mothers	Fathers	Others
Belize	1	1	4	667	4	20	-	333	250	10
Costa Rica	2	8	68	10,800	68	240	8	2,565	135	40
El Salvador	10	41	214	67,840	35	3	22	1,088	430	67
Guatemala	16	20	410	6,8000	365	50	2	2,889	2.000	410
Grenada	3	3	4	914	4	50	-	250	200	15
Honduras**	7	67	2.383	114,706	96	536	55	3,952		250
Jamaica	1	2	4	500	4	100	4	120	60	50
Paraguay	4	4	32	4,250	4	50	2	2	2	-
Peru	2	1	6	1,500						
Dominican Republic	1	1	68	13,200	68	76	1	140	140	40
St. Lucia	2	2	3	422	3	76	-	200	180	10
Saint Vincent and the Grenadines	2	2	3	560	3	45	-	150	120	10
<b>Total</b>	<b>51</b>	<b>152</b>	<b>3,193</b>	<b>283,359</b>	<b>654</b>	<b>1,246</b>	<b>94</b>	<b>11,689</b>	<b>3,517</b>	<b>902</b>

\* ESG - Educational school gardens

\*\* Data from the "Sustainable Schools" reports sent by the country

## INTRODUCTION

In all continents, there has been growing interest and discussions on the subject of school feeding, due to its importance as a strategic intervention tool for social protection and the application of the Human Right to Adequate Food, recommended as one of the key components of the sustainable development in the long-term.

The SFP constitute a factor of risk prevention against school evasion/dropout; the limitations of learning and school performance due to hunger and malnutrition; the worsening of nutritional deficiencies, especially of micronutrients, and chronic non-communicable diseases resulting from inadequate nutrition.

Moreover, when SFP purchase directly from family farmers, they become an important tool to break the hunger and poverty cycle and improve the living conditions of this group, as they enable the selling of their products on more favorable terms, generating income for local families and contributing to the improvement of their food and nutrition security (FNS) status.

### *11 years of Technical Cooperation between Brazil and FAO in school feeding*

The National School Feeding Program of Brazil (PNAE, its acronym in Portuguese) was implemented by the National Fund for Educational Development of the Ministry of Education (FNDE/MEC, its acronym in Portuguese) more than 65 years ago and covered, in 2019, approximately 42 million of students, offering more than 55 million of meals such as breakfast, lunch, and snacks a day.

This is possible through the constitutional determination that the SFP should be a collaborative policy between the national government, states (departments) and municipalities, and through the development of intersectoral actions among the various sectors of government and society, such as parliamentarians, civil society, family farmer cooperatives and others. It is a policy based on legal mechanisms that determine the promotion and supply of adequate, healthy and culturally appropriate food to all 42 million of students, in addition to the development of food and nutrition education (FNE) actions and the application of a minimum of 30% of the national government's resource in the procurement of fresh and healthy products, through direct institutional purchases from family farmers for school feeding.

### *A regional project to strengthen school feeding policy in Latin America and the Caribbean*

In 2009, based on its accumulated experience, the Government of Brazil, through the FNDE/MEC and the Brazilian Cooperation Agency (ABC) of the Ministry of Foreign Affairs, and the Food and Agriculture Organization of the United Nations in LAC (FAO-RLC) established technical cooperation agreements that began with the implementation of the *Project Strengthening School Feeding Programs within the framework of the HFLACI 2025 - GCP/RLA/180/BRA*. The initial objective was to contribute to the development and strengthening of local public policies of school feeding, with an emphasis on the human right to food, by offering adequate, healthy, continuous, universal and sustainable food in schools.

The Project pushed forward the discussion of school feeding as a strategy to guarantee the human right to food in schools through various activities at the regional and national levels, with the intent to strengthen the



process of institutionalization of school feeding policies. The activities were carried out in the countries, according to their demand, and respecting the objectives and realities of each one. As a result, the Project has contributed in different ways to expand the spaces for discussion and strengthen school feeding in 17 countries: Antigua and Barbuda, Belize, Bolivia, Colombia, Costa Rica, Ecuador, El Salvador, Grenada, Guatemala, Honduras, Jamaica, Nicaragua, Paraguay, Peru, the Dominican Republic, Saint Lucia and Venezuela.

The Project is organized into five products:

1. Policies and/or school feeding programs articulated with other public policies;
2. Human and technical capacities developed for the implementation of sustainable SFP;
3. Sustainable Schools implemented, monitored and evaluated in the requesting countries;
4. Knowledge and information on school feeding are generated and disseminated; and
5. Project managed (coordinated and articulated), monitored and evaluated.



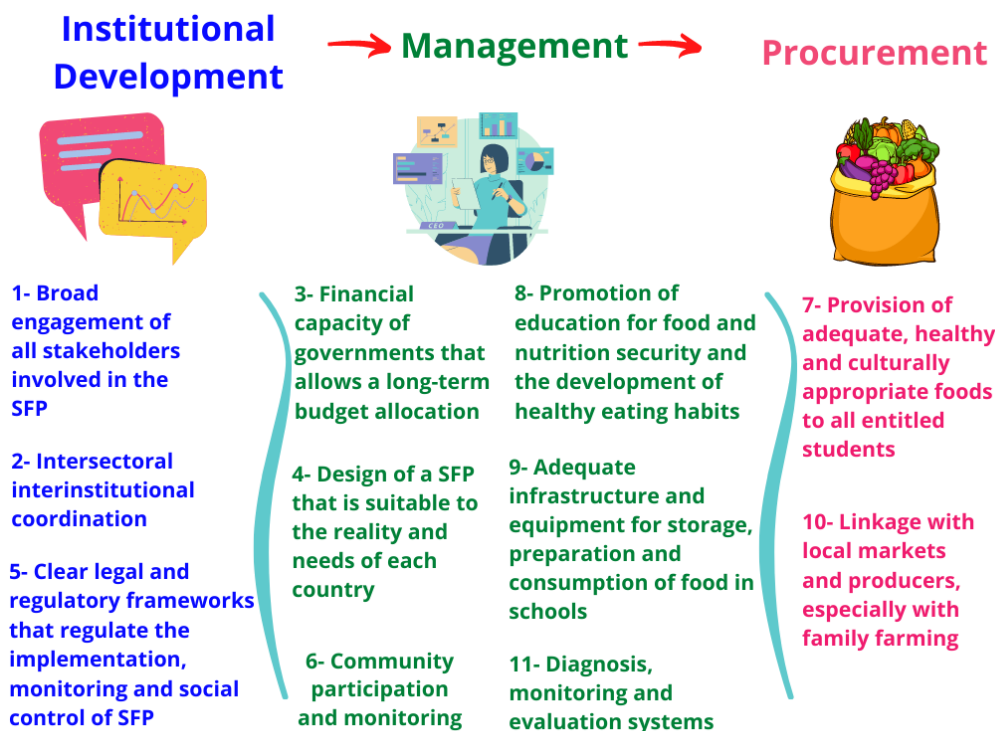
Sustainable School, El Salvador.

### Expert Forum on Sustainable School Feeding Programs in Latin America

It is worth mentioning that in 2012, the Project organized the aforementioned Forum, in Santiago - Chile, with the aim of building a reference of a sustainable SFP, identifying the elements that characterize such programs.

Recognizing the importance and scope of the SFP, the participants (international organizations, universities and governments) elaborated and signed a Declaration, proposing 11 elements - Elements of Sustainability - as short, medium and long-term goals that States should consider to develop sustainable SFP. In order to establish a methodological reference framework, the elements were grouped into three categories (institutional development, management and procurement), which are described below:

Figure 1 - Elements for the sustainability of the SFP



Source: Project GCP/RLA/180/BRA.

It is important to mention that, since the beginning of this technical cooperation, each country has had the freedom and autonomy to define the activities that they would develop in their annual Operational Plans, which were prepared, executed and monitored by the Local Technical Committees, comprised of intersectoral teams of the governments and FAO.

As previously stated, as a result of the actions and advances in the region, in 2018, the *Project Consolidation of School Feeding Programs for LAC*, (GCP/RLA/223/BRA) was approved and initiated, with similar activities, renewing the commitment of support to the countries of the region.

## SUSTAINABLE SCHOOLS - Building a sustainable SFP with many hands

The Brazil-FAO Cooperation, through this Project, has supported countries in pursuit of the gradual achievement of these 11 Elements for Sustainability through various activities, including the implementation of a methodology called Sustainable Schools (SS).

The implementation of this methodology, which has taken place since 2012, is based on the premise that schools are privileged spaces for community convergence, and the social and economic development of a people is associated with educational inclusion. Therefore, schools constitute a favorable environment to overcome poverty, promote FNS and health and, as such, they must be a reference, not only for education, but also for quality and sustainable SFP.



The national and local governments of each country selected some schools to be a concrete and practical experience of knowledge and learning building by actors at various levels such as teachers, school principals, farmers, parents, nutritionists, among other key stakeholders. And, especially, to be an initiative developed in conjunction with the ministries of education, health and agriculture.

In that sense, the SS was an activity created to link the different government sectors on a horizontal level, and also to promote articulated work with the (state) departmental and local (municipal) spheres. For this, six SS components were created and implemented, in order to allow the actors to become familiar with the challenges, the overcoming mechanisms and the potentiality.

All this, to promote visibility of a possible practice, with the purpose of scaling up the school feeding policy at national level. The understanding is that, in order to generate a sustainable SFP, activities oriented towards the components presented in figure 2 should be implemented.

Figure 2- Sustainable Schools components



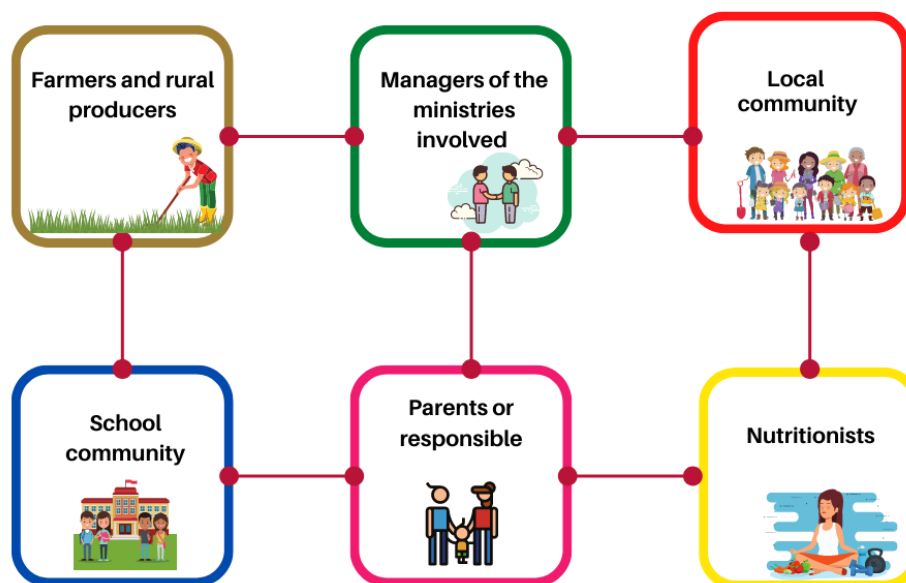
The figure below shows the step by step of the implementation of each of the six components. Although they adjustments can (and should) be made to accommodate the specificities and realities of each country, the experience in implementing SS in 12 countries has shown that it is important to ensure that these steps are followed. Implementation always begins with Component 1 - Interinstitutional and intersectoral coordination - which will lay the foundations and guarantee the establishment of the others, followed by Component 2 - Community involvement and monitoring the remaining components will be implemented in parallel, according to the social and political conditions and priorities of each country.

Figure 3 - Step by step for adequate implementation of SS

1 - Interinstitutional and intersectoral coordination	2 - Community involvement and monitoring	3 - Food and nutrition education and educational school gardens	4 - Improvement of infrastructure for school feeding	5 - Adoption of adequate and healthy menus	6 - Direct purchases from local family farming for school feeding
<p><b>Step 1</b> - Set up interinstitutional and intersectoral committee at national and local level</p> <p><b>Step 2</b> - Undertake participatory consultation</p> <p><b>Step 3</b> - Plan the SS pilot in collaboration with all stakeholders</p> <p><b>Step 4</b> - Run the SS pilot</p>	<p><b>Step 1</b> - Set up technical committee at local level (municipalities)</p> <p><b>Step 2</b> - Raise awareness in the school community about the SS pilot</p> <p><b>Step 3</b> - Plan local actions in collaboration with all stakeholders</p>	<p><b>Step 1</b> - Convoke the National Technical Committee (NTC) and formation of the Local Technical Committee (LTC)</p> <p><b>Step 2</b> - Diagnose best practices of FNE</p> <p><b>Step 3</b> - Plan FNE activities</p> <p><b>Step 4</b> - Train technicians and managers for the FNE</p> <p><b>Step 5</b> - Carry out follow-up of FNE actions</p>	<p><b>Step 1</b> - Call of the NTC and formation of the LTC</p> <p><b>Step 2</b> - Diagnose infrastructure status in the school</p> <p><b>Step 3</b> - Plan actions for the improvement of school infrastructure</p> <p><b>Step 4</b> - Identify budget for the school infrastructure component</p> <p><b>Step 5</b> - Carry out infrastructure work</p>	<p><b>Step 1</b> - Set up committee for the development of FNP</p> <p><b>Step 2</b> - Carry out Study on the Nutritional Status of Students (SNSS)</p> <p><b>Step 3</b> - Analyze school meals offered in schools</p> <p><b>Step 4</b> - Follow the mapping of local production of family farming (FF)</p> <p><b>Step 5</b> - Develop adequate, healthy and culturally appropriate menus</p> <p><b>Step 6</b> - Develop complementary actions</p> <p><b>Step 7</b> - Systematize the FNP document</p>	<p><b>Step 1</b> - Convoke the LTC with involved institutions</p> <p><b>Step 2</b> - Review legal frameworks and public policy related to SFP and FF</p> <p><b>Step 3</b> - Identify budget and define processes for public purchases</p> <p><b>Step 4</b> - Map local FF production (supply)</p> <p><b>Step 5</b> - Identify school feeding demand based on menu elaborated</p> <p><b>Step 6</b> - Put in place process of local and direct purchases from FF for school feeding</p>

For the implementation of the SS and these steps, it is important to highlight the main actors throughout the process:

Figure 4 - Main actors involved in the process



## APPLIED METHODOLOGY

Next, each of the components and steps to implement the SS in those countries interested in strengthening their SFP are presented in detail.

### A. Interinstitutional and intersectoral coordination

This component implies intersectoral and interinstitutional coordination among all public policies related to school feeding, such as education, health, social and economic development policies, as well as agriculture and, especially, policies related to family farming.

#### *Step 1. Set up an interinstitutional and intersectoral committee*

The first step consists of establishing communication with all stakeholders involved with the public-school feeding policy at national level. This coordination should be formalized through the establishment of a an interinstitutional and intersectoral body, such a "committee", for example.

This committee has major importance because it is coordinated by the institution responsible for the SFP in each country, which is usually the education sector at the central level, and will be responsible for the interinstitutional and intersectoral coordination of the SS actions at local level.

In addition, this national committee will guide and help set up a local committee in the provinces or municipalities, where the pilot will be carried out, which should include actors involved with school feeding,

health and FF at local level. Likewise, it is important to guarantee the participation of all the institutions and organizations of civil society that, at national and local levels, are related to school feeding, FF, health and social protection.

### ***Step 2. Undertake participatory consultation***

The national committee will conduct a participatory consultation process (before, during and after the implementation of the SS) with the stakeholders involved at the local level, mainly with the participation of students, the educational community, family farmers and local representatives. The purpose of this consultation is to know the opinion of the educational community about the various actions that will take place in their schools and community. It is important get familiar with their opinion and involve them in the decision-making processes, so they become an integral part of the process.

### ***Step 3. Plan the SS pilot in collaboration with all stakeholders***

It is necessary to establish the functions of each institution participating in the implementation of the SS and an integrated work plan, which will allow the proper execution, monitoring and follow-up of the activities.

### ***Step 4. Run the SS pilot***

The execution of the six components of the SS, in its different stages, can take up to a year of work. However, the first direct effects on the educational community can be observed in six months, although throughout the year, other components that require medium and long-term processes will developed during, such as, for example, the FNE and school gardens for educational purposes. Below, you can see images of the different levels of participation in the initial implementation processes:



Ministry of Health, discussing the implementation plan of the Food and Nutritional Plan. SS, Saint Vincent and the Grenadines.



Representative of the Ministry of Agriculture at the National Technical Committee talking to the school community about the SS. Belize

## B. Community involvement and monitoring

The involvement of families, students, principals, teachers and local stakeholders is considered essential. This participation constitutes a solid basis for the sustainability of the actions carried out in schools and is a crosscutting element in the entire process of developing sustainable SFP.

The main objective of this component is to empower the community actors involved in the implementation of SS. Likewise, to strengthen the community structures recognized by the SFP in the countries, such as the School Feeding Committees (SFC), the Parent's Organization, among other mechanisms of community participation.

### *Step 1. Set up technical committee at local level*

Each country has a different socio-political dynamic, both nationally and locally. However, the countries where best practices have been achieved have been those where technical committees have involved local authorities (alcaldes/mayors), the educational community, farmers associations and non-governmental organizations (NGO), in addition to local representations of education, health, agriculture and others involved in the process.

Once the local committee is established, a mapping of other actors who work directly and indirectly in the implementation of school feeding activities should be carry out. This will allow the inclusion and empowerment of all key players and the proper implementation of the SS activities.

### *Step 2. Raise awareness in the school community about the SS pilot*

Once the mapping of the actors has been completed, a process will begin for strengthening the existing structures and the provision of new functions, especially the SFC, comprised mainly of parents, community leaders and local actors linked to education, health, agriculture and local NGO, when they exist.

The empowerment and strengthening of these community expressions is achieved through consultation processes to obtain their opinion on the activities that must be implemented, to provide information and opportunities for discussion and to establish mechanisms of transparency and accountability, allowing a strong participation in decision-making of the actions that will be developed.

### *Step 3. Plan local actions in collaboration with all stakeholders*

It is important to give a privileged space to the community in the processes of planning the SS components, to ensure that these processes are participatory and democratic and that they become institutionalized at local and national level. This enables people to have greater access to decision-making and to discuss the issues that influence their lives and work. There are a variety of actions that the community can develop, but mainly integrate and actively participate in the SFC.

## C. Food and nutrition education and educational school gardens

The FNE subject is very broad and there are many studies that address its concept. In this document, the following FNE concept is adopted, considering its wide dimension:

FNE, in the context of the fulfillment of the Human Right to Adequate Food and the guarantee of FNS, is a field of knowledge and of continuous, permanent, transdisciplinary, intersectoral and multidisciplinary practice that seeks to promote autonomous and voluntary practices of healthy eating habits. The practice of FNE should make use of approaches and educational resources that promote problem-solving skills that favor the dialogue with individuals and public groups, considering all life stages, stages of the food system and interactions and meanings that contribute to the development of eating behaviors (Brazil, 2012).

It is important to point out that, in addition to the nutritionist, several professionals can (and should) develop FNE. In schools, with the support of nutritionists, FNE must be integrated into the school curriculum, continuously, through various academic subjects. This action should be related to the real world of the students, with the aim of promoting exploration, critical and creative thinking on different topics related to food and nutrition, school feeding, FNS, food cultures and the environment. In addition, it must develop their skills for making informed and conscious decisions and problem-solving, promoting responsible citizenship.

School gardens are excellent strategies of FNE, as they are living laboratories that allow everyone - adults and children - to observe, explore and experience the natural world. In addition, school garden programs have been shown to increase student consumption of fruits and vegetables. Also, they are great for engaging the entire school community, students and families. It is essential that they have an educational approach, which means that they are also used as permanent educational tools, fully integrated into the curriculum. In order to achieve a good FNE result, the following steps are recommended:

### ***Step 1. Convoke the national technical committee and formation of the local technical committee***

At local level, a technical team with professionals from the education, health and other sectors involved should be established, so that, in conjunction with the national committee, they develop an action plan for FNE.

### ***Step 2. Diagnose best practices of FNE***

Before starting the planning, it is important to identify what already exists and what has been done in the country in relation to FNE, both in relation to plans, strategies, projects, and in relation to practices in schools, identifying especially the good practices. For this, it is important to count on the support of the education and health sectors and promote the dissemination of local good practices, through workshops, exchange of experiences among teachers from different schools, dissemination of materials, and other strategies that contribute that the successful experiences are disseminated and the progresses made on the subject are widely known.

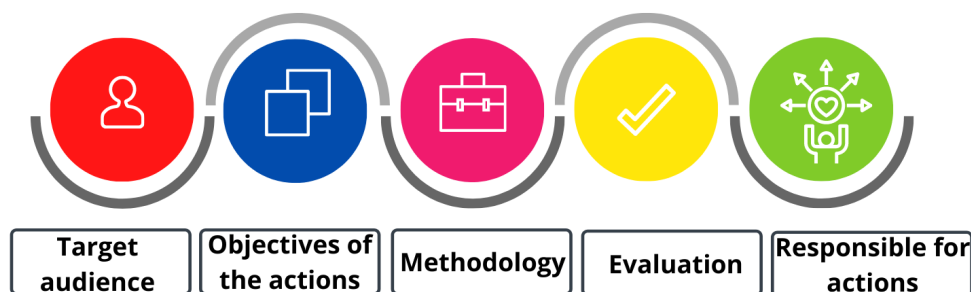


### Step 3. Plan FNE actions

The FNE activities should be planned considering three levels of participants: 1) health and education managers and technicians, 2) principals, teachers and other educational community; and 3) parents. It is important to be very familiar with the reality of each public, establish clear and measurable objectives and, from there, plan educational strategies, methodologies and tools, which must be diversified and adapted to each group. For the students, it is possible to make use of gastronomy/culinary classes, field visits to family farmers, dramatization, music, production of texts and murals, food fairs, among others.

It is important to consider the diagnosis of good practices of FNE practices carried out to develop an action plan, which should contain these aspects:

Figure 5 - Elements of the action plan



### Step 4. Train technicians and managers for the FNE

One of the proposed strategies is to include technicians and managers (from health and education) in the processes of addressing the issues related to FNE and school gardens for educational purposes, through capacity development trainings, so they can subsequently, replicate the methodological and thematic content with teachers and principals in schools and, these actors, in turn, will be able to develop activities with students and families.

### Step 5. Carry out follow-up of FNE actions

The follow-up is essential to ensure that FNE implementation is taking place as planned and to identify progress and challenges to allow the necessary adjustments. The evaluation will identify if the planned objectives were achieved and the effects on the participating public. The members of the national and local committees, especially from the areas of education and health, can establish a training, monitoring and evaluation schedule, offer contributions and educational materials to teachers, encouraging the development of activities established in the schools' FNP (see more of the topic below).



Sustainable SFP doing FNE on World Food Day. SS, Costa Rica.



Educational school garden. SS, Costa Rica.

## D. Improvement of infrastructure for school feeding

This component represents the effort of investment in infrastructure and adequate equipment for storage, preparation and consumption of food, especially kitchens, storage rooms and school canteens/dining areas/cafeterias, in order to guarantee adequate conditions for the kitchen staff and students, who must have an adequate and pleasant environment to eat, which will contribute to strengthen healthy eating behaviors.

### *Step 1. Call of the national technical committee and formation of the local technical committees*

As a first step, it is necessary to start a planning process and determine the responsibilities of the participating actors.

### *Paso 2. Diagnose infrastructure status in the school*

It is necessary to carry out a diagnosis with the objective of identifying the status of the kitchen, the storage room, the dining area, the kitchen utensils and cutlery, the water reservoir and supply, among other important elements linked to school feeding. This diagnosis can be supported by the Ministry of Education or another institution in charge of this function in the country. It is important to consider the aspects of hygiene, food safety and handling, especially after the new post-COVID 19 pandemic reality.

### *Step 3. Plan actions for the improvement of school infrastructure*

The following figure presents a sequence of phases corresponding to the improvement of infrastructure, starting with a diagnosis of the initial situation, through which the needs of the school are known, followed by the planning and organization, until the desired result is achieved.

It is important to mention that the community involvement in this component encourages the participation of these key actors throughout the whole process of the implementation of the SS, guaranteeing learning, continuity and sustainability of the proposed strategy.

The sequence of images below corresponds to the process of building the kitchen, the school canteen and the storage room in the framework of the SS in countries of Central America and the Caribbean.

Figure 6 – Improvement of infrastructure for school feeding



#### Step 4. Identify budget for the school infrastructure component

According to the experience of the countries, the contribution from governments is essential, both in relation to the technical and in relation to the financial aspects. The education sector should identify possible sources, which can vary from international cooperation, national and local NGO, municipal (local) governments, including the contribution of the educational community, especially the participating families.

#### Step 5. Carry out infrastructure work

Improving the infrastructure of kitchens, school canteens and storage rooms is also an important strategy of FNE, since it will result in the improvement of the food preparation, supply and storage spaces. The construction of an adequate dining area with all the necessary equipment, for example, allows students to eat together, sitting properly, using plates, glasses, and cutlery.

The execution of the work must involve the community and local actors such as the municipalities and various institutions, as well as the Ministry of Education. This participation, in addition to generating articulation and innovation for the students, promotes local territorial development.

### E. Adoption of adequate and healthy menus

The SS methodology is based on the premise, widely recognized, that healthy eating habits and good nutrition in childhood promote adequate growth and development, learning, health and reduced risk of chronic diseases throughout life.

The school is one of the most important environments for health promotion and healthy eating and life style practices. In this setting, students have the opportunity to reflect, discuss, learn about and experience issues related to health and nutrition, through the food offered and the actions of FNE. Thus, a sustainable SFP must offer healthy, culturally appropriate, fresh and local food, that is quantitatively and qualitatively adequate. To achieve this, it is essential that the school menu is developed with the support of a nutritionist or a nutrition technician.

The menu is a key component for the proper implementation of the SS, because from this tool:

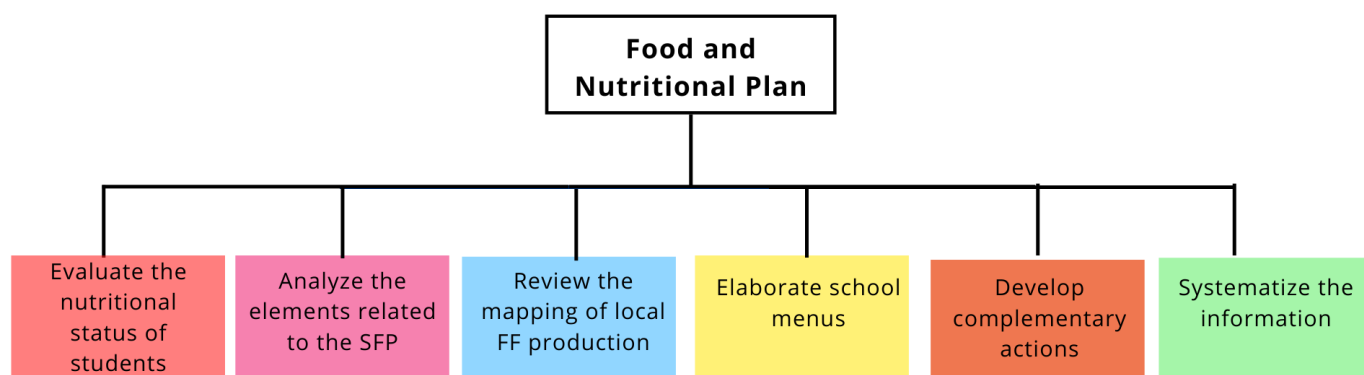
- it is possible to identify the type, amount and frequency of the products that will be purchased, prioritizing, whenever possible, products from the family farmers;
- teachers can plan their FNE activities, including the actions in the school garden for educational purposes, so that the students can discuss the various topics involved, plant and taste the foods that will be served at school;
- the school can plan to have adequate and sufficient utensils (cutlery, plates and pots) for the preparation and consumption of food;
- the school can develop a plan of the training actions for the kitchen staff to receive, store and prepare foods properly; and
- the school community and families become aware of the foods offered to the students.

### *FNP – a required action for the success of the experience*

Based on the experience gained with this process, in order to plan and implement an appropriate menu for school feeding, it is necessary to develop a FNP. The Plan should contain useful information for the different actors that support the implementation of the SS, such as the managers of the education, agriculture and health sectors at national and local levels, the principals, teachers and kitchen staff of schools, family farmers and rural extensionists.

The main steps for developing the FNP are presented below:

Figure 7 - Steps for the implementation of the FNP



### ***Step 1. Set up committee for the elaboration of FNP***

At first, the actors involved in this component should be summoned to define the responsibilities corresponding to each sector. The health sector will play an essential role, since it is part of its institutional competence, at local and national level, to define where the experience will be implemented. Furthermore, there must be a close dialogue with the education and agriculture sector, with the SFP and other key actors that may exist, such as local NGO, for example.

### ***Step 2. Carry out Study on the Nutritional Status of Students***

The Study on the Nutritional Status of Students (SNSS) general objective is to provide health and nutrition indicators of the students, as well as information about their eating attitudes and practices, the FNE actions implemented in the school, the school feeding, the reality and local needs of the schools and the school community, so that specific action strategies related to school feeding and health can be designed.

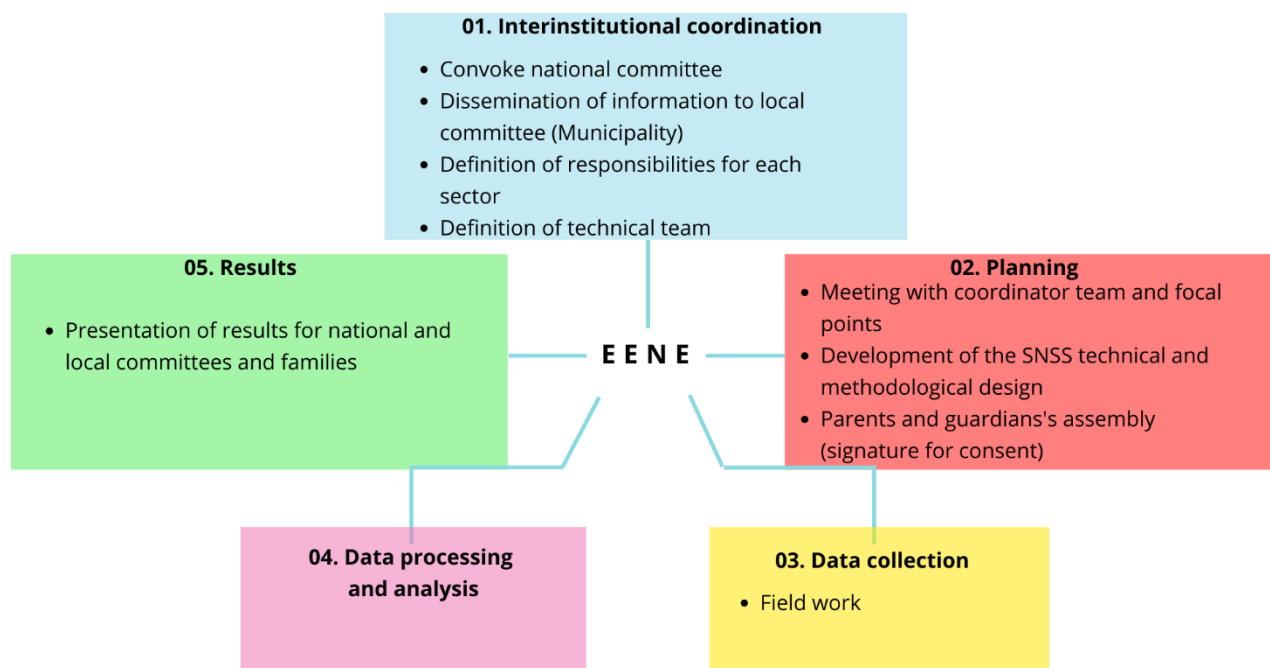
In that sense, the study becomes an important tool for raising awareness among managers for effective decision making regarding the SFP. The information can be used as: a) baseline to allow comparisons before and after implementation of the SS; b) inputs for FNE activities and c) nutritional adequacy of school menus, considering the nutritional status of the students, aspects of food consumption and the reality of students and schools.

The education and health sectors, at a national and municipal (local) level, are the institutions responsible for executing and monitoring the SNSS. The participation of a nutrition specialist, in addition to representatives of the education sector, is essential for the success of this action.

As a result of the SNSS, it is also possible to involve and empower the community around the school feeding activities and the nutritional and health status of their children. The feedback of the results of the study to the families is very important and should be planned as one of the SNSS actions.

In general terms, the development of the SNSS is divided into five phases, presented in Figure 8 and detailed in Annex (SNSS methodological design, Student questionnaire, Teacher questionnaire, School questionnaire).

Figure 8 - Stages of the SNSS



### Step 3. Analyze school meals offered in schools

It is important to analyze the current school feeding offered in schools, with the objective of identifying the need for adjustments in terms of quantities, quality, diversity and source of the food supplied, as well as in the food recipes and preparations. In order to do some information related to the current SFP should be identified, such as:

- ✓ **Food basket:** identify which foods are part of the current food basket, in what quantities; if they are acquired through resources allocated by the government or if they rely on any other resource, such as contribution from families, resources of the schools or the school gardens.
- ✓ **Menus:** identify the existing menus, if they are cyclical, which meals are offered in the school daily and at what time; if different portions for different age ranges are offered; and the recipes used.
- ✓ **Suppliers:** find out if the SFP already purchases from family farmers (local producers); if so, identify their location, foods produced, and their production and logistics capacities.
- ✓ **Cost:** identify the daily and annual cost of school feeding, per student.

Through the application of the School Questionnaire (Annex), it is possible to obtain this information.

### Step 4. Follow the mapping of local production of family farming

The elaboration of the school menu must be carried out concomitantly to the mapping of the local FF production, and the nutritionist responsible for the menu must accompany the entire process of the mapping



as well. Not only because he/she will use the information obtained to develop the menus, but also because he/she will have the opportunity to talk to the farmers, verify if their products meet the required quality and health standards, and identify their challenges and needs in terms of capacity building in sanitary practices, size and shape of products and packaging requirements, for example.

Therefore, it will be responsibility of the nutritionist:

- ✓ Link school feeding with FF to add local products not yet included in the menu;
- ✓ Define the list of seasonal foods and adapt the menus to offer fresher foods;
- ✓ Identify foods that are part of the school menus and request producers to meet the demand without interruption;
- ✓ Plan together with the farmers the food delivery plan in schools, according to the established menu;
- ✓ Run a cost analysis of the menus;
- ✓ Provide guidance to farmers about quality control requirements that products and packaging must comply with.

It is recommended that the nutritionist maintain fluid and ongoing communication with local and regional farmers, in order to make the necessary adjustments in the school menus and in the food procurement process, as well as to encourage that they begin to produce new products to meet the demand of the school feeding.

To learn more about the mapping of the food produced by local family farmers, see Component 6.

### ***Step 5. Develop adequate, healthy and culturally appropriate menus***

The nutritionist should develop the menus of the schools or municipalities, based on information collected in the mapping and in the SNSS. It is important to have the Annual School Calendar, to consider school days, school holidays and vacation, and also to identify the number of students enrolled in each school. In general, when preparing menus, it is recommended:

- ✓ the use of healthy, regional and fresh foods, such as vegetables and fruits, and preparations that respect the local food culture, prioritizing, whenever possible, foods produced by local family farmers;
- ✓ the inclusion of diversified foods, from different groups, such as grains, legumes, different types of meats (red and white), dairy products and fruits;
- ✓ the development of menus based on the caloric and nutritional recommendations (proteins, carbohydrates, fat, vitamins and minerals) of the students, according to the different age ranges and the time period the student remains in school;
- ✓ considering the net weight, gross weight, and food correction factor to determine the necessary amounts of food for preparations and, consequently, for purchases;
- ✓ prioritizing preparations with low amounts of salt, sugar and fat. If necessary, adjustments in the current recipes should be made;
- ✓ the offering of foods that are prepared (from scratch) and presented in different ways, raw and cooked, and that the preparations should be attractive, tasty and well accepted by the students;

- ✓ that the menu is flexible, especially in relation to the products from FF, so it is possible to make timely substitutions when food prices are too high, when a specific product is not in season or when there is a problem with the harvest, for example;
- ✓ compliance with the requirements of good practices and safety in all stages of storage, preparation and consumption of food;
- ✓ the establishment of the amounts per capita for each food on the menu, which will allow obtaining the amounts of foods needed for the whole school year, including the foods to be purchased from FF;
- ✓ that the food supply must be continuous throughout the year, without interruptions; and
- ✓ that the menu should provide an estimate of the daily and annual cost per capita of school feeding, as well as the annual cost per school, in order to develop the procurement plan.



Nutritionist measures the height of the students for the SNSS. SS, Belize.



School feeding with FF products. SS, Belize.

### **Step 6. Develop complementary actions**

The first step to support the development of healthy eating habits is to provide healthy foods, but this may not be enough to encourage students, especially if they are not familiar with these foods. It is crucial to develop complementary actions to provide practical opportunities that promote reflection and learning about food and nutrition. It is important that the school feeding offered is linked to the actions of FNE in order to motivate them to eat new and healthy preparations in a fun way. Other factors that may attract them are the experiences they have at mealtime, the way related topics are approached and discussed, and how food is prepared.

It is equally important to ensure the good quality of food at all stages of the food storage, preparation and supply process. In this sense, below, some actions that should be carried out in the schools throughout the implementation process of Component 5 are suggested:

#### **Activities with the school cooks:**

- ✓ **Theoretical and practical training** of the cooks or food handlers responsible for the preparation of the school feeding based on the menu set for the year, in the following topics:

- ◆ Food safety and sanitation;
- ◆ Food handling and preservation of non-perishable and perishable items, including the ones from FF;
- ◆ Revision and adjustments in the recipes, when there is a need to reduce the amounts of salt, sugar and fat;
- ◆ Development of recipes, when new foods are included;
- ◆ Hygiene of the areas of preparation, storage and consumption of food;
- ◆ Correct use of the scale, net weight, gross weight and cooked weight; and
- ◆ Food handling from FF.

### **Activities with students:**

- ✓ **Activities of FNE** should be carried out in parallel with the food offering, in order to encourage students to try and eat novel foods, especially the new recipes/dishes;
- ✓ **Use educational school garden as an educational tool**, by all teachers and in different grades. It is possible to plant several of the new foods in the garden to stimulate students to learn more about and try them;
- ✓ **Carry out tests of acceptability of the school feeding** with the students, often, in the following situations: a) when new foods are introduced; b) when there are innovative changes in food preparations; c) to evaluate the acceptance of the menus offered. A questionnaire can be applied, through a hedonic scale survey or another type of methodology, considering the different age ranges, or by measuring the waste of some preparations.

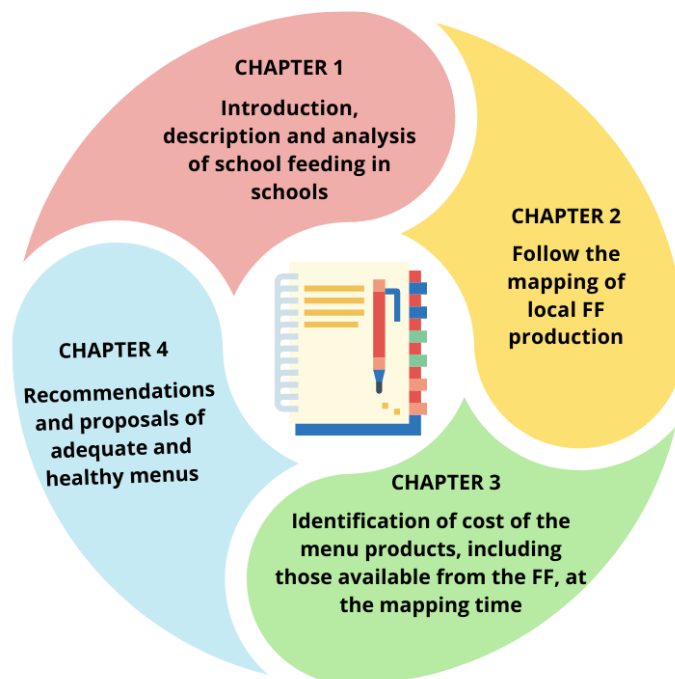
### **Activities with teachers:**

- ✓ **Conduct FNE training** so they can include topics related to food, nutrition, environment and health in the school curriculum, in a crosscutting manner, using the school garden and other different educational resources.

### **Step 7. Systematize the Food and Nutritional Plan document**

During the execution of the previous steps and in order to have a reference of the process that is capable of demonstrating its sustainability, it is important to document and systematize the implementation, identifying the methodologies used, the processes, the main results and lessons learned and costs (if possible), for replication in other territories.

Figure 9 - Chapters of the FNP



## F. Direct purchases from local family farming for school feeding

This purchase consists of acquiring foods directly from local FF producers, with the aim of guaranteeing food diversity, respect for food culture, community participation, development of local economy and improvement in life quality of SS participants at the local level.

As a result of this initiative, diversification and increased food production, as well as the promotion of more sustainable production practices by farmers are expected.

### *Step 1. Convoke the local technical committee with involved institutions*

The experiences in LAC countries that have started this process in the last years indicate that the establishment of a national committee (comprised of representatives - with decision-making capacity - of the ministries or secretaries of education, health, agriculture, social development, mayors) has shown excellent results.

### *Step 2. Review legal frameworks and public policy related to SFP and FF*

For an eventual support in the legislative system, it is necessary to review the legal frameworks and corresponding policies, considering that this component is not yet sufficiently advanced in the region. It is important to solve the problems that result from this in the short term.

In terms of medium and long-term actions, it is important that the responsible sectors, especially from the ministries of agriculture, seek synergies with parliaments, farmer organizations, civil society, NGO and private initiative, for example.

### *Some good practices identified in the pilots:*

- ☺ **El Salvador** - Transfer public funds to schools that purchases directly from FF. For this, a local procurement mechanism under existing regulations of the Ministry of Education was established, which allows public purchases directly from FF, thus complementing the foods distributed by the government.
- ☺ **Honduras** - The National School Feeding Program (PNAE, for its acronym is Spanish) covers 1.3 million students in 298 municipalities in the 18 departments (states), with a basket of dry foods (rice, corn, oil, beans, cereal), during 150 school days. In 2020, through the Agreement with the World Food Program (WFP), USD 23.3 million were executed. On average, the food basket is worth USD 0.12 per child per day. Under this umbrella of the WFP Agreement, PNAE has developed agreements with 105 municipalities to offer fruits, vegetables, dairy products and eggs, thus complementing the dry food basket that they were receiving. Under this modality, they are benefiting 300,000 students, with a 2020 budget of USD 10.6 million. On average, the cost of the fresh basket is USD 0.24 per child per day.
- ☺ **Paraguay** - In the last two years, significant progress has been made in this area, with the adoption of the Presidential Decree nº 1056, of complementary modality called "*Simplified procurement process of agricultural products from family farming*" and, subsequently, the approval by the Congress of the School Feeding and Sanitary Control Law nº 5210, which recognizes the right to food of students and seeks to promote physical well-being. Subsequently, the Law was regulated, which also enabled the purchase of food from FF.
- ☺ **Guatemala** - In the framework of the School Feeding Law (2017), and its regulations, the Ministry of Education, in the modality of financial transfers to the Parents Organizations, according to *Ministerial Agreement nº 1096 of 2012 Regulation for Transfers of Financial Resources to the Educational Councils and other Organizations of Parents*, agreed with a financial allocation for the delivery of rations and products that cover the nutritional needs of the students during the annual school period. A budget for the school feeding program of USD 159 million was executed and the daily amount of USD 0.50 per student was awarded, which benefited 2.3 million children from the preprimary and primary levels of the national public education system. To guarantee nutritional quality and the linkage with FF, school menus were developed including with fresh and local foods.
- ☺ **Belize** - During 2018, as a result of the agreement between FAO (Hunger-Free Mesoamerica-AMEXCID) and the Ministry of Agriculture of Belize, and in coordination with the Ministries of Education and Health, an administrative-financial mechanism was designed for the purchase of food and expedited payment to family farmers residing in the area where the four pilot schools were located. In addition, the first phase of validation of the mechanism was carried out, providing healthy foods to 700 children from the four schools for 60 days.

### ***Step 3. Identify budget and define processes for public purchases***

Two important aspects deserve consideration:

- ✓ The budget allocation for the school feeding should be constant and sustainable over time, and specifically allocate resources for purchases of foods from FF. It is possible to establish, in a legal framework (law), a minimum percentage required, like the case of Brazil.
- ✓ State programs must be established to support the FF segment, such as financing at preferential rates, harvest insurance, technical capacity, among other aspects.

In regards to possible purchases processes, depending on the political and administrative situation of the countries, a financially decentralized management model can be designed, as was attempted in Paraguay and the Dominican Republic. In countries where there is a centralized structure, deconcentration models are being implemented for the implementation of SS, through the transfer of specific funds (such as El Salvador, Honduras and Guatemala). In both cases, it is recommended a gradual and transparent implementation, without losing control of the management process.

### ***Step 4. Map local family farming production (supply)***

A mapping of the FF producers/organizations/cooperatives and their production (type, quantity, quality, periodicity, potential) should be conducted, with the identification of reference prices for each product, including costs of transport and other logistics components related that are necessary to ensure the proper delivery of the products to the schools. It is important to mention that this process must be the responsibility of the Ministry of Agriculture, and the monitoring must be carried out by the body responsible for school feeding.

### ***Step 5. Identify school feeding demand based on menu elaborated***

As explained in component 5, the FNP developed must include a list of the foods that will be purchased from family farmers so as to establish the demand for school feeding, as well as the quantity, frequency, period of delivery and technical specificities of each food. In the case that any planned food is not available, it is necessary to establish, together with the nutritionist, another food item to be delivered in substitution.

### ***Step 6. Put in place process of local and direct purchases from family farming for school feeding***

After completing the steps above, considering the legal frameworks related to food procurement and having the supply and demand established through the FNP, the procurement mechanism to be used should be established. The main objective is that the model could be replicated using state resources supported by current regulations in each country.

Another important aspect is related to the strengthening of the system for monitoring the food quality and safety, based on well-established policies and regulations. In this sense, in addition to a nutritionist, it is also important to guarantee the participation of an agronomist, and the involvement of the health and agriculture sectors and agencies working with consumer advocacy.



Family farmers must have capacities to produce safe and good quality food, through training and technical assistance in organic production, good agricultural and manufacturing practices, post-harvest management, proper use of agrochemicals, packaging and safety.

Likewise, those in charge of receiving and preparing foods in schools must also participate in capacity trainings in food quality and safe handling.

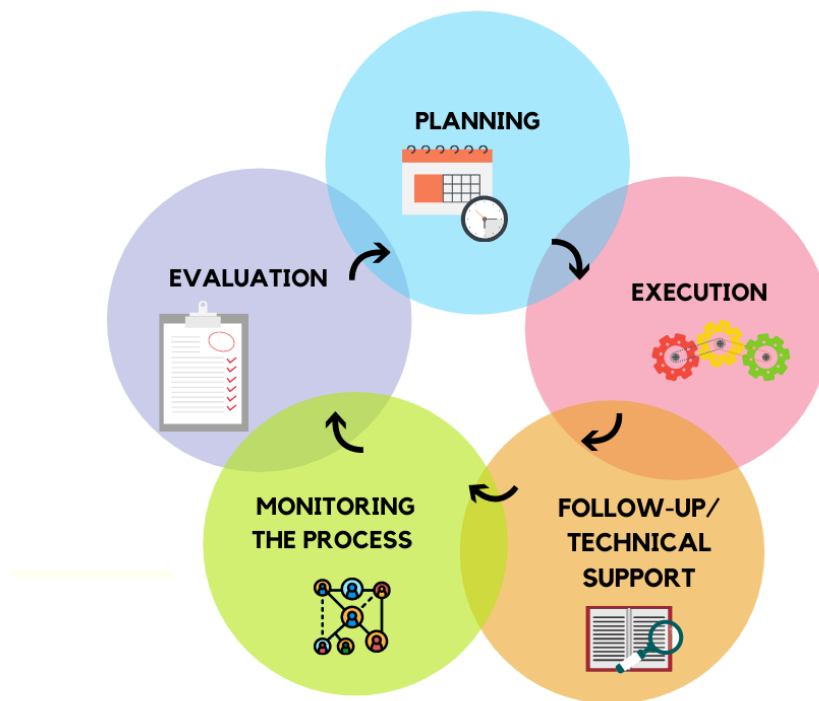
It is essential to have systematic records about the whole purchasing process, including the before, during and after processes. This allows generating better possibilities of comparison, of cost analysis and of evaluation of the implementation of school feeding.

## G. Follow up, Monitoring and Evaluation

The SS are based on six components and their implementation is a virtuous, permanent and coordinated cycle, where the components are mutually complementary. To achieve the objectives, a coordinated management process is absolutely necessary, from the planning, guidance, follow up and execution, to the monitoring and evaluation of results, in a continuous cycle.

It is important to remember that, in order to achieve a good management, all processes must have the participation of the involved actors (government managers, students, the school community, families, family farmers, among others).

Figure 10 - SS management



The results should guide new decisions, redirect planned actions and adjust the entire process, in order to achieve the successful implementation of schools that are, in fact, sustainable. Under the scope of the Project, all those involved are responsible for this activity, consisting of two important elements:

- **Process monitoring:** monitoring actions are those that allow collect and identify data and information, verify whether the tasks are being developed, identify the numbers and accompany the achievement of goals, objectives and results. It is essential to document the relevant events in the execution of the six components with meeting minutes and reports, budgetary data, images and videos of the six components.
- **Evaluation:** through the evaluation, it is important to identify the results produced in the implementation/management/execution of the SS - at the three levels of intervention: national, municipal (local) and community - in addition to identify the changes that occurred in schools, in the family farmer's and other local stakeholder's life involved in the development of this experience.

It is important that the coordination of the Project and those responsible for the implementation of SS in the countries are directly involved in guiding this process.

The results of the processes of follow-up, monitoring and evaluation will allow the registration of information to promote, in addition to the systematization of the experience, actions that strengthen the process of institutionalization of sustainable SFP and policies, through appropriate mechanisms at the local, regional and national level.



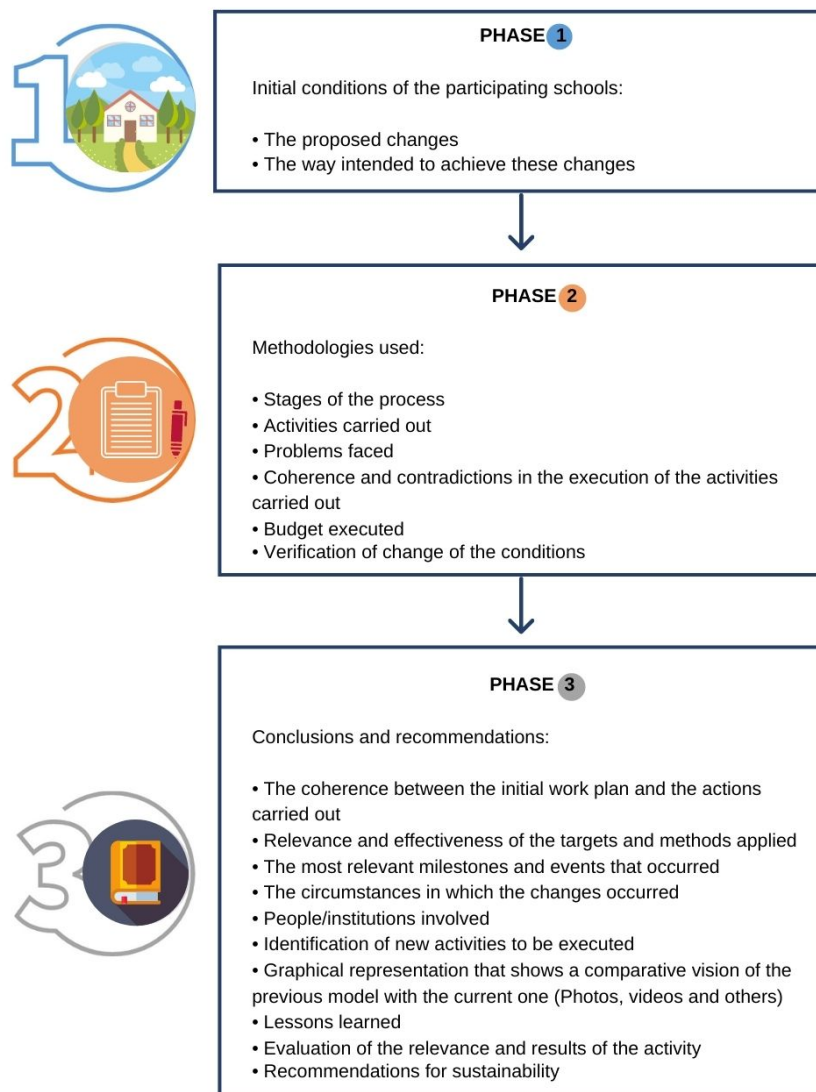
Educational school garden. SS, Costa Rica.



Pedagogical fair, products of family farmers. SS, Paraguay

## Systematization of the experience

For the process of systematization of the SS activities, three phases are considered:



Once the process of compiling, reviewing and analyzing data and information is completed, the final report of SS is prepared to be officially submitted to the government team.