



DIAGNOSIS OF THE CONTEXT AND FOLLOW-UP OF ATTITUDE CHANGES FOR EFFECTIVE ACTIONS OF AN AGRICULTURAL INNOVATION PROJECT

Diagnóstico del contexto y seguimiento de cambios de actitud para acciones efectivas de un proyecto de innovación agropecuaria

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ABSTRACTS. With the objective of evaluating the influence of the context on the impacts of the Local Agricultural Innovation project, two tools were designed for its monitoring and evaluation: context diagnosis and step - by - step monitoring of the change of attitude in the achievement of the expected effects. The first with four fields at the national level: no influence, slight influence, medium influence and high influence. The second tool, representing four qualitative levels, starts reflecting the initial situation and then in a stepwise manner, determines possible actions for its evolution over time to reach the desired level of change of attitude leading to the achievement of the expected effect. Its application since the year 2014 has shown its usefulness to guarantee the project's resilience in relation to the influence of the context, as well as the design of an efficient action plan in correspondence with the strategies and priorities of the organisms and governments. It was possible for actors with different perspectives, interests, roles and powers to create negotiated commitments that meet common needs. For this purpose, a collective appropriation of the processes with well defined responsibilities was also necessary. The context evaluation and the staggering of the attitude change allow a reading of the sustainability of the actions of the projects in the short, medium and long term. The results provide the possibility of developing a coherent action plan to ensure project resilience.

Key words: communities, socioeconomic environment, context assessment, anthropogenic influence

RESUMEN. Con el objetivo de evaluar la influencia del contexto en los impactos del proyecto de innovación Agropecuaria Local, se diseñaron dos herramientas para su monitoreo y evaluación: diagnóstico del contexto y seguimiento escalonado del cambio de actitud en el logro de los efectos esperados. La primera con cuatro campos a nivel nacional: sin influencia, leve influencia, mediana influencia y alta influencia. La segunda herramienta representando cuatro niveles cualitativos, inicia reflejando la situación de partida y seguidamente de forma escalonada se determinan posibles acciones para su evolución en el tiempo hasta llegar al nivel deseado del cambio de actitud conducente al logro del efecto esperado. Su aplicación desde el año 2014 ha mostrado su utilidad para garantizar la resiliencia del proyecto en relación a la influencia del contexto; así como, el diseño de un plan de acciones eficiente en correspondencia con las estrategias y prioridades de los organismos y gobiernos. Se logró que actores con diferentes perspectivas, intereses, roles y poderes crearan compromisos negociados que satisfagan las necesidades comunes. Para ello fue también necesaria una apropiación colectiva de los procesos, con responsabilidades bien definidas. La evaluación de contexto y el escalonamiento del cambio de actitud permiten dar una lectura a la sustentabilidad de las acciones de los proyectos en el corto, mediano y largo plazos. Los resultados brindan la posibilidad de elaborar un plan de acciones coherente que garanticen la resiliencia del proyecto.

Palabras clave: comunidades, entorno socioeconómico, evaluación del contexto, influencia antropogénica

INTRODUCTION

Participatory monitoring and evaluation in local agricultural innovation processes is consolidated as a change in the methodological approach in which the community,

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donors and policy makers as a whole decide how to measure the progress of the projects and what actions to implement for maintain and improve results. The focus of monitoring and evaluation in development projects has changed over the last decades (1), of control and performance over activities, has been aimed at identifying best practices and lessons learned and the attitudinal change achieved by all those involved taking into account their surroundings. Monitoring and evaluation today are geared to ensuring that development activities are constantly improving, their execution and the involved actors learn to make the right decisions, guide the process and achieve the planned objectives (2).

In Cuba, a technology transfer process is still being carried out in specific local contexts to meet certain food production programs, where most technology transfer decisions are assumed as general policies, as well as in the localities are currently introducing interventions involving diverse people who have spontaneous cooperation in the experience (3). These are among others who personally participate in the decisions and actions of the technology or the development process. However, it is necessary to identify other actors who although they are not part of the direct actors, have an important influence on the experience because they control decisions or actions related to inputs, financing, legal regulations, etc, which impact more or less immediately on the development experience dissemination.

In many cases, an acceptable level of subsequent analysis that identifies, assesses and draws conclusions on the impact of the transfer of such technologies is not achieved, either with respect to the objectives initially set or with respect to their effects in other different fields and complementary to the goals initially envisaged if the opinion and views of both types of actors and their attitude change with the development of innovation processes are not evaluated in the systematization. Participants in the innovative processes are diverse and will have different visions, opinions and interpretations on each of the components of the model and the attitude change will not be the same in all. Context models generally serve to give people a better representation or less adequate and relevant in their contextual environment (4). Innovation in the agricultural sector is a process where different actors participate where each one of them has their own perspective or point of view on the development process that is systematized and have criteria that are necessary to make them compatible (5).

The context is formed by a series of circumstances that facilitate or impair the development of the projects; in addition in the execution of the initiative there are changes of attitude in favor of the impacts of the project which must be monitored to be more effective.

The objective of this work is to present some practical tools for planning, self-monitoring, self-evaluation and external evaluation in the processes of local agricultural innovation, based on indicators of direct effects and products relating the effect of context on the project "Dissemination of Participatory Plant Breeding in Cuba", which as part of Phase III of the PIAL (PIAL III) is implemented in 10 provinces and 45 municipalities in the west, center and east of the country, with the coordination of the INCA and the participation of other institutions research and training related to the agricultural sector^A

MATERIALS AND METHODS

MONITORING THE CONTEXT EFFECT IN PIAL III

The project annually evaluates participatory the context at two levels "municipal and provincial" and "national", together with the evaluation of the attitude change in the three effects that the project has and the fulfillment of the logical framework, is designed more efficiently The Annual Operational Plan (POA) for each of the 45 municipalities where PIAL III is implemented.

The context evaluation at the municipal and provincial levels is published by the same authors (6). In that case, four fields of observation were taken into account (actions related to updating the Cuban economic and social model at the territorial level, local seed production, seed price and other inputs (fertilizers, farm implements, fuel) and the effects associated with climate change (catastrophes and meteorological events).

This article presents the second level of evaluation, which is the national level. The same is done in the month of November of each year from 2014; it took into account four fields of observation: actions related to updating the Cuban economic and social model (choosing four specific categories), evaluation of the effect of the economic and social policy guidelines of the Party and the Revolution,

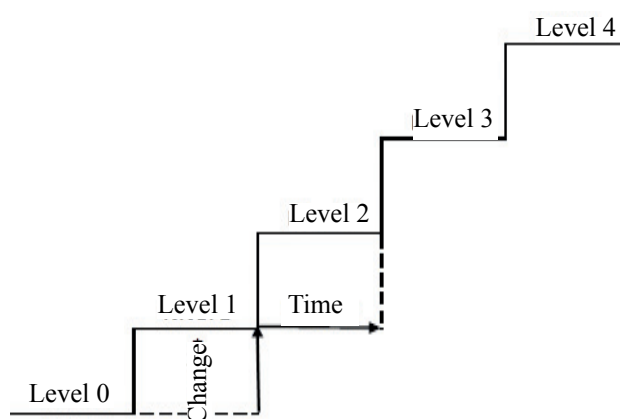
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incidence in the achievement of food security and interaction with organisms and programs, with 16 of the 19 possible specific categories evaluated to measure their effects with a qualitative scale: no influence, slight influence, medium influence and high influence in a positive or negative way depending on the case. In each field and specific category, the problem and the plan of actions to be implemented to achieve the adjustment of the programmed results to the context (Table I) is outlined. Although these elements are beyond the scope of the project, their knowledge allows a reading of the sustainability of actions in the short, medium and long term.

Qualitative assessment, in turn, enabled the elaboration of the baseline for monitoring the context at the national level and identifying possible actions to contribute to the solution of the problem at different levels. The case of the III National Workshop on Monitoring and Evaluation of PIAL is presented as a case on December 10th and 11th, 2014, in Havana.

PHASED MONITORING OF ATTITUDE CHANGE AT EFFECT LEVEL IN PIAL III

Similar to the context assessment, the stepwise monitoring of the attitude change in the expected effects of the PIAL III is carried out through a qualitative scale in five levels that allows visualizing with more clarity these indicators in their evolution as shown in (Figure 1).



- 4- Desired level in exchange for attitude (Goal)
- 3- Third evolution
- 2- Second evolution
- 1- First evolution
- 0- How do we see each other today?

Figure 1. Attitudinal change in expected effects of PIAL III

In the work, this tool considers the results obtained in the evaluation of Effect 1 of the PIAL III called “Good practices provided by the local innovation system”, are implemented by the municipal strategies and incorporated into national policies in one of the reference workshops.

Table I. Fields of observation, category and scale of assessment for the diagnosis of the context at the national level

Fields of observation		Specific Categories
Actions related to the updating of the Cuban economic and social model (four specific categories are chosen from 1 to 7)	1	Commercialization
	2	New forms of management
	3	Redesign of the Local Market
	4	Reestructuration of MINAG (Ministry of Agriculture according its acronyms in Spanish)
	5	Agritourism in farm
	6	Insurance and Credits
	7	Sales to tourism
Evaluation of the effect of the economic and social policy guidelines of the Party and the Revolution	8	187 Increase yield rotation, sustainable agriculture
	9	188 Integral seed policy
	10	191 Local agroindustries
	11	197/198 stability of the workforce and permanence of rural youth
	12	200 training producers
	13	204 Preservation of soil, water, forests
	14	205/206 Local self-sufficiency
	15	Recognition impact of PIAL actions
Incidence on the achievement of food security	16	System of local agricultural innovation, related to the guidelines 129
	17	MINAG
Interaction with agencies and programs	18	ANAP (National Association of Small Farmers according its acronyms in Spanish)
	19	Projects and Foundations
Scale and gradient used to measure effect		
Grades of the Scale		Gradient
0		Without influence
± 1		Sight influence (L)
± 2		Moderate influence (M)
± 3		High influence (A)

RESULTS AND DISCUSSION

MONITORING THE EFFECT OF THE CONTEXT AT THE NATIONAL LEVEL IN THE PIAL III

On the effect of actions related to the updating of the Cuban economic and social model (Table II), participants in the exercise in 2014 chose to evaluate specific categories 1, 2, 3 and 6 related to marketing, new forms of management (I include agro-tourism (5) and sales to tourism (7)). Insurance and loans were the most important in a positive way, although with a gradient of slight influence, considering that they were the most influential in the outputs of the project at the national level. However, it was considered that the redesign of the local market has a slight influence (L), negative for consumers and producers for the high prices in the same.

Related to the effects of the economic and social policy guidelines of the Party and the Revolution, participants chose to evaluate all specific categories from 8 to 14, which includes 9 more guidelines related to the objectives of the project, considering that were the ones with the highest incidence in the country's outflows during the year 2014. There are positive effects with slight influence (L) related to the guideline 187, 191, 197, 198, 200, 204, 205, 206; however, the 188 related to the integral seed policy was considered negative with medium influence (M), due to the non-existence of measures in favor of local seed production during 2014. In addition, the problem of climate change since in many territories of the country it has affected the planting of the seed,

therefore it is considered that in most municipalities (6), the effects of climate change related to the long periods of drought or continuous rains affect the context in the localities (8, 9).

Regarding the effect of the incidence on public policies and the interaction with organisms and programs, it is considered that there is a favorable context, but with weak effects, where communication and exchange actions are urgently needed and a broad communication strategy for this purpose^B

The assessment of the context has to be visualized as a necessity that is complex and must be addressed multidisciplinary. As a result of the adjustment processes and structural change in regional and urban economies, local responses to the globalization challenges have emerged, resulting in new formulas of action in cities and regions based on consensus social and promoted by civil society (9). This idea is strengthened when it is established that regional and local development depend more and more on a set of intangible assets, where the qualification and training of human resources in the management of local initiatives, regional and local development planning and territorial analysis have become a necessity to compete globally and have increasingly taken center stage in this process^C.

^B Diseñada la Estrategia de comunicación sobre el SIAL, relatoria del taller nacional del PIAL en Las Tunas el 15 y 16 de julio de 2015.

^C Urquiza, I. *Desarrollo local en el contexto internacional actual* [en línea]. Monografias.com, 18 de diciembre de 2015, [Consultado: 18 de diciembre de 2015], Disponible en: <<http://www.monografias.com/trabajos33/desarrollo-local/desarrollo-local.shtml>>.

Table II. Gradients assigned to the specific categories in each field of observation

Observation fields	Specific categories	Degrees
Actions related to the updating of the Cuban economic and social model, (four specific categories are chosen from 1 to 7)	1 Commercialization	+1
	2 New forms of management (incluye: agriturismo, sales to tourism)	+1
	3 Redesign of the Local Market	- 1
	4 Reestructuration of MINAG (Ministry of Agriculture according its acronyms in Spanish)	
	5 Agritourism in farm	
	6 Insurance and Credits	+1
	7 Sales to tourism	
Evaluation of the effect of the economic and social policy guidelines of the Party and the Revolution	8 187 increase yield rotation, sustainable agriculture	+1
	9 188 Integral seed policy	-2
	10 191 agroindustrias locales	+1
	11 197/198 stability of the workforce and permanence of rural youth	+1
	12 200 training producers	+1
	13 204 Preservation of soil, water, forests	+1
	14 205/206 Local self-sufficiency	+1
Incidence on the achievement of food security	15 Recognition impact of PIAL actions	+1
	16 System of local agricultural innovation, related to the guidelines 129	+1
Interaction with agencies and programs	17 MINAG	+1
	18 ANAP (National Association of Small Farmers according its acronyms in Spanish)	+1
	19 Projects and Foundations	+1

Table III shows the evaluation of the four specific categories within the field of observation: updating of the Cuban economic and social model and the actions and goals to be achieved by PIAL III to make the project impacts related to this field more efficient.

Regarding the local market redesign, the evaluation of the evaluators was negative; although it has a slight influence it must act to try to reduce the production value, to propose to the authorities to eliminate new and unnecessary intermediaries. It is necessary to work to improve the incentive for the producers taking their products to the local market, besides promoting the differentiation of the organic and ecological productions with others. In addition, it is necessary to study the importance of origin designation in local production. It is also necessary to influence the dynamism of the economy at this level but decreasing exports of production to other territories.

Work on the visibility of a differentiated market recognized by governments. Finally create capacity for use and management of credits with the support of the Municipal University Centers (CUM, according its acronyms in Spanish), by intensifying the management of knowledge on credit aspects.

Related to the evaluation of the measure plan on the other fields of observation presented in Tables IV and V, it can be observed that in the models of endogenous growth the accumulation rate of productive factors and growth depends fundamentally on decisions that are adopted in a given and concrete economic environment and that in the long term, growth is the result of an endogenous economic process, considering the existence of imperfect competition (10).

In the analysis in these localities, what has been proposed is to influence the changes in the economic adjustment so that new resolutions and laws can flow more easily and the impacts of the project are seen more in the beneficiaries. There are results that give particular elements that characterize their performance (11). Producers show a high capacity of work and real commitment, with the improvement of the agricultural situation that allows climbing higher levels in the cooperation, articulation and the establishment of synergies in the management of the territorial and national agricultural development, to achieve in the medium and long term, a more efficient local seed production.

What has been discussed so far, has a lot to do with the endogenous development that localities must have, in that sense it is indicated that endogenous growth models allow a better approximation to the assessment of local problems (12).

To understand processes of growth at the territorial level, based on the understanding that these processes depend on the perception of territorial actors, who make investment decisions on the conditions that exist in these territorial environments to value their capital. In addition, several actors establish that it is necessary to clarify the pertinence relations between the structural variables of the agricultural popular knowledge system and the structural variables of local development at the rural level as a basis for promoting the transformation of the agrifood production dynamics of the locality (13, 14).

Table III. Explanation of the scale and gradient given to the specific categories related to the field of observation “Updating of the Cuban economic and social model” and the actions and goals to be achieved by PIAL III

Actions related to the updating of the economic model	
Specific Categories, synthetic basis for evaluation	Actions and goals or effect to be achieved
Commercialization (+1) due to the existence of new market spaces that make it possible to differentiate production as a result of innovation, but the implementation is still weak	Working in the market visibility differentiated by ecological production and diversity, recognized by governments
New forms of management (+1) although the legal framework exists, it is still difficult to implement, requires exploring and evaluating in depth different resolutions and other measures	Encourage experiences that generate evidence of successful partnerships, work on linking all agro-technical BPs and intensifying the creation and exploitation of biodigesters
Redesign of the local market (-1) has raised the value of productions. Sometimes a new actor appears in the local market	Study of chains. Intensify and stimulate local marketing with added value and completion
There is no incentive for producers. Organic and ecological productions are not differentiated from others. The local is not revalued. The economy is not dynamic at this level since exports are exported to other places	
Insurance and Credits (+1) in insurance has greatly improved its use and has favored new productive ventures. New usufructuaries in the use of the credits are lacking	To create capacities for use and management of credits, to intensify the management of the knowledge on the credit aspects

Table IV. Explanation of the scale and gradient given to the specific categories related to the evaluation of the effect of the guidelines in the field of observation on the updating of the Cuban economic and social model and the actions and goals to be achieved by PIAL III

Evaluation of the effect of the guidelines of the economic and social policy of the Party and the Revolution	
187 increase turnover performance, sustainable agriculture (+1) It has benefited the development of the PIAL BP (good practices)	Training to all productive forms taking into account chain approach. Increase and experimentation on MC farms
188 Integral seed policy (-2) high prices, low availability and low quality	Encourage local seed banks, create more points of sale of certified seeds and draw municipal strategies for the production and conservation of seed
197/198 Stability of the labor force and permanence of rural youth (-1) It has been trained, but there is a lack of youth leadership in the communities and a commitment to permanence. Limited jobs for women	To continue creating and consolidating GIAL of young people. To continue intensifying vocational motivation and orientation - circles of interest. Designing own actions of young people. To continue training of young people Actions to achieve employment of women, work to achieve the service of attention to children and old women so that they can join various tasks as this makes it impossible to incorporate them
200 Training of producers (+1) The critical mass of producers trained in different topics and forms of production has increased	Socialization of experiences and exchange between producers in different scenarios. Survey of demands or needs in related topics by regions. Facilitate training actions through PMGs and synergies with other actors / projects / initiatives. Prioritize management training and cooperativism
205/206 Local self-supply ... +1 Diversified products, better quality, with added value (agro-ecological, processed, etc.) Marketing in all popular councils	To continue diversifying the farms. To work on denomination of origin and brands of IAL products. Consolidate seed farms

Table V. Explanation of the scale and gradients given to the specific categories related to the fields of observation "Incidence in the achievement of food security" and "Interaction with other agencies and programs" as well as the actions and goals to be achieved by the PIAL

Impact on the achievement of food security	
Recognition of the impact of PIAL actions (+1) There is a recognition of the PIAL and the SIAL	Achieve participation to present the results in the spaces created, for example: ANAP bureau and MINAG advisory technical council
Local agricultural innovation system (Line 129) (+1) It has the theoretical and practical elements and many actions are executed, pending the final writing of the SIAL	Finish the SIAL document for decision makers and work on the version for technicians and producers. Articulate PIAL actions in strategic spaces. Examples: inspection visit in urban agriculture, agroecological movement of ANAP and others that identify themselves
Interaction with other agencies and programs	
With the MINAG (+1)	They will be included in the POA based logical framework, actions to achieve attitudinal change and related measures to fit the context, include and more involved in strategic programs of the ANAP and MINAG where they can provide answers to the problem of good practices (BP)
With the ANAP (+1)	Increase communication strategy, intentional actions that generate impacts, generate good communicative products, identify positive experiences of the BP and use them in the communication strategy
With other Projects and Foundations (+1) There is a link but much more can be achieved	Act more strongly in the articulation with other projects (publicize the Participatory Evaluation by protagonists (EPP) to "Value the generation, use / adoption and dissemination of local agricultural innovations promoted by the PIAL project that affect the improvement of the quality of life of producers "and the diagnosis carried out related to the security and independence in seed), deepen the systematization of the impacts in the project to obtain strong data, more action in the Forum and achieve training in BP and participatory system for other projects and NGOs officially

For this reason, it is necessary to identify and develop the resources and potential of the community members, so that they are able to empower themselves and solve their problems, self-directed with a critical vision of what they are and what they can be, overcoming limiting obstacles^D.

It is therefore important to reflect on the development and constraints that remain to be resolved. This way of evaluating the context influence on innovative projects is a useful and important tool. Special attention should also be given to reorienting the current system of extension with a focus on local problems, and before it, the payment for environmental services is an urgent necessity, not only related to measures in favor of soil but also in favor of plant diversity and animal. It is imperative to devise a strategy for their use and to take advantage of idle areas, as well as the planting of local seed banks to substitute imports of human food and animals. Without a strategy for the production of the necessary seed, it will be difficult to achieve, it is necessary to implement strategies according to the situation of each province and municipality, aimed at solving food security and mitigating the effects of climate change in the agricultural sector, and valuing the influence of context on local innovation can be useful.

^D Pérez, R. D. A. *Empoderamiento y resiliencia en el contexto de pobreza* [en línea]. Monografias.com, 18 de diciembre de 2015, [Consultado: 18 de diciembre de 2015], Disponible en: <<http://www.monografias.com/trabajos-pdf4/empoderamiento-y-resiliencia-contexto-pobreza/empoderamiento-y-resiliencia-contexto-pobreza.shtml#ixzz3LLbY945Y>>.

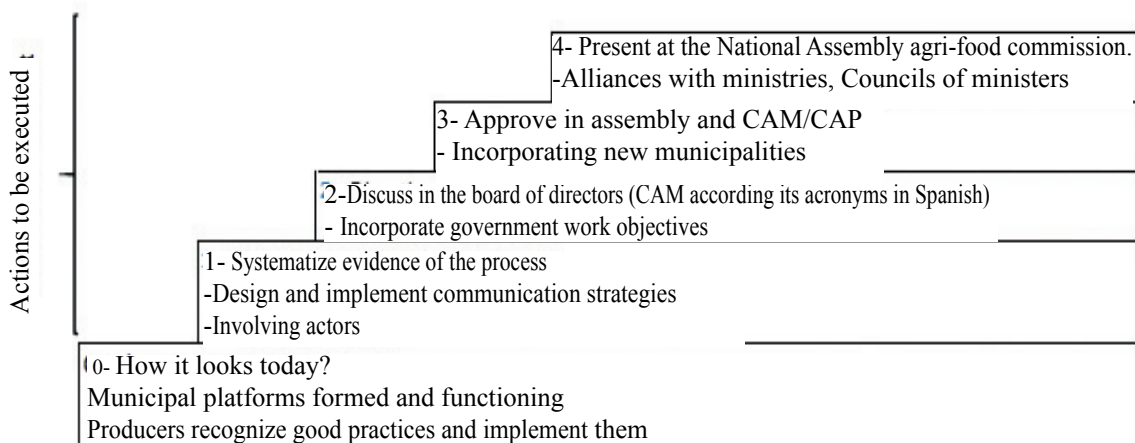
These results demonstrate that it is imperative to develop creative and innovative projects that contribute to identify, address and solve social and productive problems, based on systemic methodologies that take into account the context, solve problems in a systemic way and are sustained in the Facing the difficulties based on the ethical project of life (15).

PHASED MONITORING OF ATTITUDE CHANGE AT EFFECT LEVEL IN PIAL III

Although the logical framework of the PIAL project has three effects, the effect 1 is presented in this case. It has a wide scope, only the results of the evaluation are used at the national level. It should be noted that each province and municipality has adjusted the steps that they considered necessary to move from the initial situation to the goal of the attitude change to achieve each effect. (Figure 2)

In developing the steps needed to achieve the change in attitude, it was understood that the multi-management platforms (PMG) in the 45 municipalities where PIAL III operates are formed and operate with systematicity, but they must be recognized. It must be achieved that all are recognized by agreements of the administration council (CAM) of People's Power.

Actually the first step is widely fulfilled. In the first step (evaluation one), we have worked fully with good specialists and with a wide participation of those involved.



Change of Attitude effect 1

Good practices provided by the local innovation system are implemented by municipal strategies and incorporated into national policies

Figure 2. Steps needed to achieve the content of PIAL effect 1

It has been possible to form a group of documents that allows an intense and sustainable action of which is the SIAL and its advantages:

- ◆ Informative folding: in brief presents the SIAL, aimed at government decision-makers.
- ◆ Folder or triptych: its main emphasis is to outline what SIAL is, its components and functioning, as well as the scope and impacts it has achieved to date. It reinforces contributions to local development and to the implementation of the Guidelines. It is designed for a fast and basic reading level. If you want to deepen then you have to review the methodological pamphlet that extends the proposal.
- ◆ Brochure: it is a document that contains the methodological and conceptual bases of the SIAL. It delves into operational issues, and raises the question of the need for a participatory management model for innovation and development. It provides recommendations for decision making. It can coexist with the triptych, which complements.
- ◆ Slide presentation (Tutorial): presents key ideas of the SIAL, illustrates through examples and substantive messages its usefulness and ways to implement it. It can be used in presentations, workshops, meetings or public events.
- ◆ SIAL Manual: conformation and operation of the Local Agricultural Innovation system for a participatory approach to development management.
- ◆ Communicative campaign on the SIAL: includes important experiences achieved in the project

In the second step (evaluation two), and 30 PMG are institutionalized by the municipal governments, by CAM agreements, work is done to ensure that the rest achieve it in 2016.

In the third step (evaluation three), some PMG are institutionalized by municipal governments and have rendered account to the Municipal Assembly of People's Power. Actions are carried out in other municipalities of the country; In parallel, the first actions are carried out in other municipalities in the country. They also update the local development strategies of each of the municipalities in the PMG and take the first steps to shape the PMG at the provincial level. The implementation of actions to encourage the participation of municipal governments is in line with decentralization and the increase of their management.

In many places there are experiences that show that it is possible to obtain agricultural production through sustainable systems, provided that farmers, technicians and extensionists are given a stake, which has been a major challenge for scientific centers and universities in recent years (16).

In the fourth step (desired level), actions are initiated so that the SIAL is recognized at the agency level, and ensure that it is incorporated into the national policy. It should be noted that the SIAL is to organize locally the interrelation between the actors involved in the operation of agrifood chains in such a way that: a) the limited resources available for research are guided to the specific needs of the farmers and the actors that integrate The productive chains; b) take advantage of the local knowledge of the farmers themselves and other actors to stimulate diversification and increase production in a sustainable way; c) the access of the productive units and other actors of the chains to the knowledge of their counterparts in the territory, the universities and the research centers.

Decentralization actions support local recognition of communities (16-18). Talking about local development in Cuba is a necessity and a challenge at the same time. The national debate has been conditioned by a group of ideas or precepts, which have generally been biased by disciplinary or thematic approaches. However, it is worth emphasizing that in the current context there is an invaluable theoretical and practical platform, a set of institutions and a relevant scientific potential that can lead to the strengthening of these processes in country^E.

The participatory process by which local actors transform knowledge into value is a process of local innovation. Interactive work as the basis of community learning, makes it possible to achieve value creation by finding solutions to complex problems (19). The process of finding successful solutions to such diverse problems, balancing and diminishing the differences of interests in their environment is complex and it becomes necessary the negotiation and the commitments of all the forces.

At present the process leading to local development reaches a large dimension and it is considered to be the most viable alternative for the moments in the country. Before and after the Sixth Party Congress (20), local development thus seen is a competitive territorial strategy based on the full exploitation of the potential of endogenous utility, with the appropriate insertion of exogenous strategic impulses and resources.

In view of this, several principles of action are needed to improve the quality of innovation processes. It is necessary to integrate the perspectives, knowledge and actions of different actors of the locality around a common theme of interest to the majority.

^E*Fundamentación del Programa*. Programa Acogido a Prioridades Nacionales Desarrollo Local en Cuba (PAP), Inst. Centro de Estudios de Desarrollo Local (CEDEL), 2014, La Habana, Cuba.

It is necessary to constitute the learning of actors working together, integrating analysis, action and change through the different “dimensions” of development and integrating analysis, action and change at different levels of organization.

In the agricultural sector, the processes of rural innovation lead to the creation and transformation of roles, human capacities, professionals and institutional changes. It is a complex, multifaceted process where the integration of knowledge from multiple sources is required. It is necessary to achieve that actors with different perspectives, interests, roles and powers create negotiated commitments that satisfy the common needs. For this, a collective appropriation of the processes is also necessary, with well-defined responsibilities of each of the participating actors.

CONCLUSIONS

- ◆ The context assessment and the staggering of the attitude change allow a reading of the sustainability of the projects’ actions in the short, medium and long term.
- ◆ The results provide the possibility of developing a coherent action plan to ensure the resilience of the project in relation to the influence of the context and the identification of strategies in line with the priorities of the governments.
- ◆ In relation to the updating of the Cuban economic and social model, the most selected categories of observation at the national level were commercialization, new forms of management, redesign of the local market, insurance and credits.
- ◆ The analysis of the awarded score and its qualitative foundations revealed several aspects of interest to the project executors, and it was possible to design an effective and pertinent action plan as a result of the collective work.

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We will use what was designed in the PIAL with the facilitation of the authors of this work and the active participation of all the provincial and municipal groups that make it up. All of them contributed criteria on the problematic discussed in this work.

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