# THE TEKO KAVI FOUNDATION

# PROJECT EVALUATION REPORT

'Eco-literacy from school to community in order to Live Well and in harmony with Mother Earth'. Learn Playing 3.

**Evaluation by: Jorge Aliaga Murillo** 

La Paz, Bolivia 2019

**Official Summary** 

# Project Evaluation Report: 'Eco-literacy from school to community in order to Live Well and in harmony with Mother Earth'. Learn Playing 3.

The Project's Evaluation was carried out from the 1st to the 28th September 2019, according with the Terms of reference. The method, the tools and the structure of the Evaluation were designed based on the nature of the project. The sample and the Work Plan of the Evaluation were defined in consensus with the team.

The main conclusions of the Evaluation are the following:

- The Project Objectives have been met, because the goals have reached the expected results, because the implementation strategy was appropriate (strengthen schoolcommunity-civil society relations). The proposal was expanded in the Project area, the communities appropriated the proposal and the experience and results were sufficiently disseminated to sensitize civil society and the State on these issues.
- 2. It was shown that the proposal is valid because it responds to the needs of the population, regarding the care of their natural resources and the environment to Live Well in harmony with Mother Earth, through work in schools involving various actors, to influence civil society.
- 3. The project has contributed to improve the quality of life of the population, it has valued the care and respect for Mother Earth to Live Well. Students increase their school performance with recreational methods. The Teachers have more pedagogical resources and they prepare (Higher School of Teacher Training) to carry out educational innovations. The Families have changed some eating habits with and consumption of vegetables produced in school gardens. The community participates in school activities, promoted by the project. The communal authorities manage proposals to their municipalities.
- 4. The Eco-literacy process, implemented by Teko Kavi in schools and communities, are developed in an autonomous manner because the communities, the teachers and students appropriated the model and continue to carry out the activities on their own.
- 5. The Project has achieved significant changes in the various strata of the population: at the level of the students of the schools, of teachers and principals, the parents, from the community, of the students who are being trained for teachers, of the municipality, of civil society. The analysis and description of the changes takes place in the Report and in the summary table.
- 6. The impact of the Project is directed towards the goals of Sustainable Development in the communities, because it meets many indicators, such as caring for the environment, quality of education, gender equity, and poverty reduction.
- 7. The main difficulties of the Project implementation process were in some resistance or distrust of some teachers and principals, due to job rotation and instability and due to their unfamiliarity with the Proposal.
- 8. Project budget limitations prevent having more staff and the acquirement of the necessary equipment in order to meet the Project's demands. Despite this limitation, the institution has met its goals.

The executing institution, Teko Kavi, follows a trajectory suitable for their work, which is reflected in the projects AJ1, AJ2, AJ3. They have experience and have gained prestige

amongst the communities, the schools, the municipalities, the NGOs and, and in instances of the State, where they are related.

Teko Kavi has a technical team with extensive experience, has a strategy and methodology of validated work, and the institutional capacity installed, to take advantage of it for the benefit of the country.

The issue of Environmental Education is currently very important because of the problems of climate change. Therefore, it is a great opportunity for Teko Kavi to continue working with their Eco-literacy proposal, in order to expand its coverage in other regions, and to diversify its materials by using new technologies. Keep up the work at the Superior School of Teacher Training of Santiago de Huata.

Due to the considerations mentioned above, it is recommended to continue with the Project in other regions of the country, especially in the Amazon region of La Paz, because there is prior knowledge of this area.

The technical team should be kept and supported, renewing agreements to have temporary interns and volunteers. Have sufficient financing to operate without restrictions, since the institution has demonstrated a rational and efficient administration of resources.

It is recommended to manage financing to ensure the continuity of the Project and promote the support of international cooperation because it is a valid proposal and priority for the country that can even be replicated in the region.

The Evaluation has verified that the Project, implemented by Teko Kavi, has strengthened the civil society by using the Eco-literacy Proposal in the schools and the communities. It has encouraged them to assume the protection of the environment in order to Live Well and in harmony with Mother Earth for the sake of sustainable development.

## **Project Evaluation Report**

# 'Eco-literacy from school to community in order to Live Well and in harmony with Mother Earth'. Learn Playing. TEKO KAVI. Bolivia 2019.

#### Jorge Aliaga Murillo

#### 1. Introduction

The document in question is the external evaluation report carried out by Jorge Aliaga M. for the 'Eco-literacy project from school to community in order to Live Well and in harmony with Mother Earth' AJ3, from the 1<sup>st</sup> until the 28<sup>th</sup> September 2019.

The Evaluation process was developed according to the Terms of Reference, where the objectives of the evaluation are established, its scope, the schedule. Thanks to an agreement between the evaluator and the Teko Kavi team, a sample of the communities and schools of Umala, Santiago de Huata and Hampaturi were determined.

The Evaluation is a component of the Cycle of the Project, which studies the process and the results of the project in order to value its developments, determine its limitations and its possible causes, analyses the consequences, and suggest recommendations from all that was learnt during the process.

The Evaluation is based on the evidence of data and the most significant information on the development of the Project that the evaluator has been collecting and systematizing.

The sources of primary information were provided by the Teko Kavi team (documents of the project, reports, and publications). These details were complimented by interviews and opinions on the Project during the visits to the sampled schools, where participatory observation was also practiced.

Two schools in Umala, two in Hampaturi, the Escuela Superior de Formación de Maestros de Santiago de Huata and two other schools in the area were visited. The evaluator participated in a demonstrative workshop that consisted of exchanges with teachers from Uru Muratos in Oruro.

The teachers, principals, and parent representatives of School Boards were interviewed. Some students were informally spoken to.

It was decided to elaborate a summarized report with a flexible structure in order to facilitate the analysis of the most relevant aspects of the Project's trajectory, for the usefulness of future decision-making. A summary table of the changes promoted by the Project is included at the end of the document.

The Evaluation report has descriptive, and analytical aspects in order to reach conclusions and offer some guidance.

The permanent collaboration of the Teko Kavi team was very valuable during the Evaluation, as well as their contribution to the analysis, self-criticism and their suggestions for future action.

# 2. Project and Evaluation Background

Teko Kavi, in synergy and with the support of the DIB, have implemented the Project 'Ecoliteracy from school to community in order to Live Well and in harmony with Mother Earth'. Learn through playing 3, during the period June 2016-June 2019, based on the experience from the previous projects A1 and A2 (2007-09 and 2012-14, respectively).

The Objectives formulated in the Project can be summarized as the following:

# Strengthening Civil Society (school – community) through the Eco-literacy to promote sustainable local development.

In order to attain these Objectives, the following three Specific Objectives and their respective goals were set out:

1. On the 30<sup>th</sup> June 2019, eco-literacy will be implemented as an educational method in the schools and communities of Umala, Santiago de Huata and the Hampaturi District 22, as well as in the 'Escuela superior de Formación de Maestros de Santiago de Huata'.

2. On the 30<sup>th</sup> June 2019, the school and the community (students, teachers, parents, local authorities and other figures in the civil society), will have reinforced their participatory, organizational and democratic capacities to elaborate proposals and they will have implemented socio-productive projects that focus on and use eco-literacy methods. 3.

4. On the 30<sup>th</sup> June 2019, the model of eco-literacy will have influence on a communal, regional and national level.

Summarizing the Goals, it can be perceived that they respond to the three phases of the Project:

## Expansion-appropriation-broadcasting and socialization

Expansion - the implementation of the models in the schools. Appropriation - the adoption of the model on behalf of the educational community. The broadcasting and socialization of the model in the State and in the Civil Society with the idea that it can influence public policies.

Locati on	Com muniti es	Loc al Auth oriti es	Local Authoritie s	Number of Schools	Numb er of Stude nts (pre- schoo I, primar y schoo Is and high schoo Is)	Numbe r of teache rs
Umala	45	742	90	33	1500	90

The target population defined in the Project is situated in the following communities:

Santia go de Huata	25	675	50	30	811	144
Distrit o 22, Hamp aturi	20	600	40	13	675	91
Total	101	201 7	180	76	2986	325

## 3. The socio-political and cultural environment of the Project

The environment and the context in which the Project developed is extensively described in the application of the Project (B.2. Page 8). The following aspects of conjuncture are the only ones that compliment this analysis:

Bolivia is undergoing transformation at various levels of its economic, social and political structure, especially since the early twentieth century.

Amongst the most significant changes, the calling of a Constituent Assembly that drafted a new Constitution that was approved and put into effect since 2009 is an event worth mentioning. Economic policies have maintained some stability and there has been an increase of the GDP. Additionally, there was an introduction of social policies designed to reduce extreme poverty from 41 to 17%.

However, despite the macroeconomic advances, the state of poverty amongst many families from rural and peri urban areas persists because of social inequalities and the condition of the development of the country have still not been resolved.

The Civil Society needs to be reinforced and develop its abilities to even out the role of the State and to collectively take on the tasks for a sustainable development.

International aid and various NGOs<sup>1</sup> have started financially abandoning the region in the last couple of years due to reduced funding from their sponsors or simply for a change of priorities in terms of giving aid to certain developing countries.

Regional and local governments, like the Government and local municipalities prioritize infrastructure and services rather than needs and services, such as environmental education, and health. For this reason, it is difficult to manage resources for these purposes.

No institution, be it state-funded or private, is known to be solely dedicated to Environmental Education. Some of them take this education on as an extra-curriculum activity or through campaigns against pertinent issues (water, forestation, etc.).

The current Education Law institutes a socio-productive community model at all levels of the education system. But, in many schools and for many teachers, it is not easy to apply these regulations due to a lack of widespread information and a lack of technical-pedagogical resources.

<sup>&</sup>lt;sup>1</sup> Denmark, Oxfam Quebec, Swiss Diakonía

Even though the Mother Earth Law - implemented for respecting and protecting the environment - is promulgated in terms of its application and compliance, it is a pending task in the everyday lives of the people.

The population lacks information on environmental themes, such as contamination, and climate change; harmful habits that contaminate the environment and have serious health implications prevail.

Civil Society, especially in rural and peri-urban areas, has weak social structures due to their educational limitations, the misguided information they receive about their rights, their low self-esteem, marginal status and exclusion at decision-making levels. This is hardly surprising given that the majority of this population are migrants from rural areas that look for better opportunities in urban centers.

The media handle environmental issues in a general way and sensationalist, therefore, the information they emit is superficial and incomplete.

The current situation at the end of the Project It is marked by a pre-electoral political environment (the general elections will be held on October 20, 2019).

Since August 2019 the forest fires in the Amazon have shocked public opinion and have highlighted the need to address environmental issues, both at the state and civil society level, the urgency of assuming an Environmental Education at all levels of society.

This situation is presented as an opportunity for Teko Kavi's proposal and a challenge to continue and enforce their work because it has institutional capacity installed, they have sufficient experience, and a multidisciplinary team specialized in the subject, prestige, public acceptance and popularity within public and private institutions. The team has been invited to different activities and events about the environment. For example, in Argentina where the pedagogical experience was exhibited and on a national level, National presentations are made in the cities of Santa Cruz, La Paz.

The situations are laid out within the context of the environment in which the Project came to a close. Aspects that somehow influence the development of activities, as will be analyzed in the Evaluation.

## 5. Analysis of the Objectives, goals and results

The proposal of Environmental Education, that uses eco-literacy with a playful learning approach, has demonstrated its validity and relevance as demonstrated by Teko Kavi's by energizing the community (Educational Councils, leaders) that prepares proposals to local governments around the school.

The intervention strategy in the schools that integrate the educational community (school teachers, parents, authorities and the municipality has been successful. This is recognized by all interviewees, and the results obtained have also demonstrated this. The proposal is governed by the Education Law and has made changes in the pedagogical practices of teachers.

The school gardens, as spaces for practice and educational action, learning-doing, learning-playing, constitute a vital activity for interaction, practical learning, collaborative

learning and social interaction between the school and the community. Civil society directly uses the playground space to connect with the local government.

The work in the school gardens serves to articulate the topics with the School Curriculum, because it integrates the contents with the Science areas, social sciences, and mathematics. School gardens follow the mandate to the Education Law of the community socio-productive model, that along with the toy libraries are innovations that have changed and improved teaching and learning practices.

These findings serve as a framework to verify the analysis of the Objectives. To base the above hypotheses, the three objectives set out in the Project are analyzed separately:

**Objective 1.** Teko Kavi's work has expanded in the schools of the three zones as shown in the indicator's percentages, (established in the goals of the Project). The coverage of the intervention served the schools that were chosen in the three regions.

At the start of the project there were staff changes, the team was restructured, new technicians were sought after and hired. These procedures somewhat set back the schedule. But the new team took on an intensive work pace, recovered time and achieved satisfactory results.

Ethnographic studies served as a reference to recognize the work areas more precisely, especially in the new schools where the AJ3 Project was introduced.

The results achieved in this Objective demonstrate that attention has been given to the schools covered in the Project. However, it should be clarified that not all of the schools have responded with the same level of acceptance for various reasons: one of which is the withdrawn attitude displayed by some principals and teachers, who are, by nature, initially distrustful. On the other hand, others are more receptive and open to innovations.

There exists a lot of rotation and changes in terms of the teaching schedules in schools. The team also had to face this situation at the start of every academic term, explaining the scope of the Project, demonstrating the methodology. They had to virtually restart the process at their school. In contrast, teachers who had worked there for a long time and know the model are good allies and they facilitate the steady development of the programs.

Fortunately, in most cases, Eco-literacy has been well-received. Some teachers or principals who were initially reluctant started convincing themselves of the advantages of the recreational method, due to the perseverance of the team and the evidence of the pedagogical utility of the proposal.

The results of the work in the schools to expand the EA model are evidenced in the responses of principals, teachers, parents, who recognize the hard work the Teko Kavi team put in and they express their gratitude for the work done.

Eco-literacy is a valid learning model for all ages to learn about Environmental issues, using interactive games and techniques. It is shown that play-based learning is very effective because it stimulates knowledge, senses, emotions, awareness, and cooperation. Teachers discovered that play-based learning is a very effective pedagogical method and many apply it to their daily practices.

Environmental issues cannot be reduced to traditional lecturing methods because the theme is experiential, it is related to the lives of people and families (water, health, nutrition, crops, etc.) and their relationship with nature. This is one of the fundaments of Eco-literacy and its play-based method that Teko Kavi has verified and validated in their work.

The school gardens constitute a space for training activities and demonstration of content, which are as much related to the environment as any other field of knowledge in the school curriculum.

The work of the orchards constitutes a practical learning of the operation and management of crops, whose care is under the responsibility of the students, teachers and parents. The activities in the gardens are opportunities for collective learning.

In the workshops with the teachers to present the play centers, the management of the games and dynamics was demonstrated, while information and knowledge about the Environment were exchanged. The demonstrations in the workshops led by the technicians were very dynamic and convincing, in the opinion of the teachers.

The gaming materials and the practice methods for their use, allow for the verification that they are simple, accessible and versatile materials, which can be recreated by teachers and even by students.

Some teachers and students have recreated the materials and adapted them. In many schools, there are initiatives to recycle materials (tires, plastic bottles), garden arrangement, etc. which were stimulated by the work of the Project and the support of the teachers.

Teachers who know the Manual and the guides find great use of these materials in their daily work in the classroom and as a source of consultation to continue developing school subjects.

The main difficulties in achieving the Expansion Objective are related to structural problems such as migration, especially that of the young people in the communities; the rotation in the positions of the teachers; the demand for teachers and students for other extra-Curriculum activities - such as the Plurinational Games - which demand a lot of preparation and disturbs the normal development of the school calendar.

In many cases the programming of visits to schools and the follow-up of work in the school gardens was changed or postponed, for the above reasons. Despite these inconveniences, the team has sought solutions to achieve the goals and results.

Some teachers and principals gave little support to Project activities. It is understandable that in this profession of work, there are some who are not always willing to collaborate or do what they consider as "out of office hours", because they are professionals who only seek to fulfil their function. The fear of sanctions imposed by the Ministry of Education could also be another influential factor. NGOs must request authorization to work in schools.

The team solved these difficulties during the process, with a lot of dedication and creativity.

The work of the team at the 'Escuela Superior de Formación de Maestros de Santiago de Huata' has special significance, because students, future teachers, know Eco-literacy and its recreational methods that are useful for their professional practice. Moreover, students are potential allies and broadcasters of the proposal in many regions, because they migrate and emigrate o study from different regions.

**Objective 2.** The schools and communities of the Project have appropriated this model, closely resembling the degree set in the Objective indicators. Most of the schools (principals, teachers and students) and communities, with their respective authorities, have accepted and adopted the model.

This assertion is based on the knowledge that the educational community have of the Project, the proposal as considered by what Teko Kavi transferred in their visits and workshops, the

proposal of Eco-literacy, its content, values, methods and actions to protect the environment, natural resources, Mother Earth and Living Well.

In a similar vein, the community authorities, as a civil society, feel strong enough to assume responsibilities in the school, submit proposals to the municipality as a local government.

Teachers have reinforced their training with Eco-literacy workshops because they found that recreational methods are a very effective pedagogical resource and it allows them to enrich their educational lesson-planning.

In the workshops with teachers, it was shown that playfulness, play-based learning, facilitates the teaching of not only Environmental Education, but also of all the other subjects in the Curriculum at all school levels. They have incorporated Eco-literacy activities into their Curriculum Development Plans, which signifies an important change, given that other teachers usually mechanically repeat the same Plans every year.

Playful learning helps students of all years to develop their cognitive abilities, promote values and encourage cooperation. Teachers have verified these advances and highlight that the students' self-esteem has risen, as a result of the activities organized by the Project.

Play centers are very attractive for students and teachers, their use has been adopted as one of the pedagogical resources of the schools that are complemented by their small libraries.

Some teachers, on their own initiative, have adapted and created other games inspired by the play centers presented by the Project.

The practices in the orchards has created favorable conditions for social interaction between teachers, students and parents. The parents, that form School Boards, participate in the activities of the school gardens, carry out maintenance tasks, together with the students. In addition, together with the community, they manage their needs before the municipality.

The municipalities have provided materials and, in some cases, with agricultural supplies (seeds and seedlings) for the construction of a greenhouses, and they even offer technical advice. The School Boards process the support of the municipalities, despite the state bureaucracy.

The School Boards, which represent the parents, are involved in the activities of the Project, since community participation is part of the intervention strategy.

The Communities actively participate in support of their schools. For example, in Hampaturi, they built protective walls for the community. In Siruja, thanks to the teachers, they have trees, and in other communities they promote gardening. The Community-Teachers-Students-Municipality circle is cohesive around the school, and stimulated by the Project's activities.

**Objective 3**. The third objective was achieved by the team during the development of the project, despite the lack of staff and resources needed for an intensive dedication to broadcasting, because broadcasting activities require a lot of dedication.

The spaces offered by the networks of institutions open spaces for broadcasting in civil society and allow the exchange of experiences and the widespread broadcasting of Teko Kavi's experience and their proposal of Eco-literacy.

At State level, the Ministry of Education is the main interlocutor for the broadcasting of Teko Kavi's work because they maintain a good relationship with them and a permanent flow of information.

For six months, a weekly radio program was broadcast that encouraged the participation of the teachers interviewed to share their experiences. Their collaboration with the Radio San Gabriel, that has a large audience in El Alto and the Altiplano in La Paz, was an advantage.

Broadcasting through the medium of radio and TV is very effective, but renting these spaces is both very expensive and requires a specialized staff to produce the program.

A membership with the Campaign for the Right to Education is important because it is an organization that brings together various educational institutions on a national scope.

Relationships with other institutions requires a lot of time and dedication, and to participate in events and activities requires an extra budget. Teko Kavi, who has a small team dedicated to field work, however, has tried to fulfil institutional responsibilities in order to maintain relations with other institutions, such as the Ministry of Education, Universities and NGOs, because they have good platforms for spreading awareness.

Broadcasting the Project was addressed in two ways: directly and indirectly. The direct method involved the habitual activities in the schools, in which the agents were able to prove the effectiveness of their work. Indirect broadcasting is carried out by using the information of third parties or institutions that know about the Eco-literacy proposal. For example, interns - who eventually collaborate with the team - are used to promote the Project's work in the academic and professional environments they inhabit.

On a national level, events in other regions were participated in. On an international level, the aid from two people working in the Buenos Aires team was very significant for the institution, because it was possible to present the experience that would go on to attract the interest of international institutions and networks and it allowed for the opportunity of developing new relationships.

## 6. A Criteria of the Achievements, progress and limitations/difficulties.

## 6.1. Relevance of the Eco-literacy model.

The Project Proposal responds to the needs and problems posed in the diagnosis, Teko Kavi: using Eco-literacy, they promote conscious activities based on the protection of the Environment and Mother Earth in schools, through the practice of play-based learning. The Eco-literacy proposal is legally framed around the Education Law, which advocates a socio-productive community model.

The need for complete and accessible information given to the population on environmental issues is evident because the handling of the issues is either very technical or very superficial and incomplete.

The media broadcasts partial and sensational information on these issues that is reduced to overly general advice.

Traditional teaching methods in schools are still in use, despite updated teaching programs, such as PROFOCOM. Teachers with initiatives are exceptions.

The training that teachers receive in average schools about alternative subjects, such as the Environment, is insufficient, because it is taught without the necessary didactic instruments for neither their Classroom Projects, nor for their Curriculum Development Plans.

Active, recreational and participatory methods are rare in rural schools due to the lack of educational materials and games. In many cases, it is also rare due to teachers' unawareness of the pedagogical advantages of this methodology.

School gardens are part of the Education Law and the community socio-productive model to promote a technical-humanistic education. In some schools, their orchards are neglected, due to lack of technical support, supplies or because their infrastructure is precarious.

There are no known institutions dedicated exclusively to Environmental Education in scholarly institutions and communities.

With all points considered, it is evident that the intervention strategy of the Project is very relevant because it responds adequately to each and every one of the problems highlighted. The drawn-up strategy is right to focus on its actions in schools as a promising and growing nucleus that involves students, teachers, and parents, local authorities, who are the protagonists in the transformation of familial and societal dynamics.

Regular visits to schools, training workshops for teachers, parents, community meetings, serve to monitor the Eco-literacy processes, verify the results and the relevance of the activities carried out by the team.

**6.2. Efficiency,** understood as the achievement of objectives, allows us to affirm that the Project has satisfactorily met the criteria of effectiveness.

Intensive intervention in the schools and communities, management for the municipalities, teacher training, the technical advice in the management of the orchards, displays and practices in the toy centers, as well as maintaining a relationship with the community, with parents, and the authorities have stimulated and promoted the effective fulfilment of the programmed activities of the Project (the reports testify this progress).

The team has met the goals that were set, and despite the difficulties states previously, it has recovered from initial delays in the Project. Demonstrative workshops were held for teachers, schools possess and manage their play centers, school gardens operate accordingly and produce crops, and guides and manuals have been distributed to support the work. In the available broadcasting spaces, the Eco-literacy proposal and the personal experiences have been shared.

People who have participated in the project activities value their natural resources and take care of the environment in their communities.

Eco-literacy facilitates the work of teachers and student learning because recreational methods stimulate the senses, memory, participation, and communication. Play centers and the group's dynamics promote socialization and improve self-esteem.

School gardens are spaces for communal interaction, whereby students, teachers, parents can take part. They share tasks, and they use produce to improve their nutrition.

The workshops motivate teachers to be open to innovation and to be active members in the community. The teachers have adopted the play centers into their work and apply it in their pedagogical practice. Some teachers have even created new games inspired by the Project's play centers.

The schools have their play centers, where teachers and students handle and look after the materials.

Community organizations mobilize and manage proposals before their local municipalities. The municipality considers the demands of the schools and collaborates with them to provide materials, and in some cases, with technical support for the maintenance of the school gardens.

The broadcasting of Teko Kavi's work has attracted interest from other people, schools and institutions, with whom information and experiences are exchanged.

**6.3. Efficiency**, understood as the rational use of resources to achieve the results that were obtained. The Project met its objectives by optimizing the institution's resources and budgets for execution of the programmed activities. Therefore, it can be confirmed that the Teko Kavi's participation in the implementation of the Project has been efficient.

The costs needed for the field work did not exceed the modest budget. The available resources have been optimized. The team would like to have more financial means in order to make more frequent visits, to attain more supplies and materials, to reinforce their potential.

The multidisciplinary team that has implemented the Project is small, but assumed multiple functions to meet and comply with the Project's schedule and commitments.

The agreement with the University to support the Interns' work, somewhat alleviated the short-staff difficulties that were previously faced. However, the Project still had to face the limitation that volunteers cannot be exploited.

The educational materials available in the institution, including the Ludomobile, have been taken advantage of and made available for the schools.

**6.4. Impact.** The educational communities within the Project area are active and with agency in accordance with the Eco-Literacy proposal. Students, teachers, principals, educational boards, and municipalities have participated in the activities of the Project.

Students, teachers and parents have learned to value their natural resources and take care of their environment, thanks to the Eco-literacy programs.

According to teachers, the play centers and garden practices promote interaction, practical and collaborative learning amongst students, which has inspired an elevated self-esteem, and they have improved their school's performances due to the pedagogical advantages of this method.

Equally as important, is the improvement of the nutrition of the students, the various types of products from the gardens - especially vegetables - enriches their habitual diet. On some occasions, they have even managed to sell their products in the local market.

The indirect impact of the project includes the fact that Teko Kavi's experience and popularity has inspired interest from other institutions. The exchange with teachers from the Uru Chipaya region of Oruro demonstrates the importance of the Project's work and contribution in other contexts.

The impact on local government's public policies centers on the support of the School's Productive Plans, which is mainly displayed by the provision of materials and supplies for the maintenance of the school gardens.

The participation in institutional networks, such as in the Campaign for the Right to Education and the events that they organize, is a broadcasting platform and a form of social mobility for the

Project in other institutional areas where the Eco-literacy proposal has gained popularity. This recognition is an indirect impact the Project has had.

**6.5.** Sustainability, understood as the self-managed continuity of the processes undertaken by the Project, will be assumed by teachers, and parents who have adopted and appropriated the Proposal.

The training of agents/participants, the receptivity on behalf of the educational communities and the willingness of the teachers, is aimed to sustain the project. The teachers know the methods, have the play centers, the official Guide and manuals, and the materials to continue their work. The schools have their gardens that are formally managed by teachers, students and parents. These are the minimum requirements to meet the sustainability criteria.

It is foreseeable that all the agents are required to teach the activities to new teachers and the local authorities. For example, in the case of new teachers, both students and parents will inform them about Eco-Literacy so that activities are well-informed and organized. If students neglect their homework in the orchards, the parents and teachers will need to take on the student's responsibilities, and so on.

The Guide and the manuals, and the play centers, are supportive tools and offer guidance so that teachers and students can act autonomously and ensure the continuity and sustainability of these activities.

## 7. Learnt Lessons, advice and challenges

Eco-literacy has shown that its recreational and participatory methods are effective in educating people to care for the environment, using their cognitive and conscious habits and values, which ultimately contribute to the community's sustainable development.

The Teko Kavi team has shown that it is possible to influence and promote changes in the community by using an innovative proposal, a dedicated team committed to their work and the issue.

The strategy of focusing the intervention within a school setting in order to promote the training of teachers and the community, through the use of play centers and school gardens, is an effective way of influencing the protection of the environment.

In this type of socio-educational work, the results are often manifested in a medium to longer-term basis. In the AJ3 Eco-literacy Project, implemented by Teko Kavi, it can be confirmed that the initiated processes are currently giving satisfactory results, for both the community and the institution. These results strengthen the consolidation of new communities (Hampaturi, Santiago de Huata) and motivates the team to start work in other regions.

The Project has contributed to the advancement of the Sustainable Development Objectives of the communities in the area in question, at least in terms of eradicating poverty, Vivir Bien, and improving and diversifying its production; in terms of contributing to the improvement of the quality of education; promoting the equality of women with justice; protecting the Environment, Mother

Earth, (which are the central issues of this proposal); demonstrating development, cooperation, and compromising the encouragement of supportive institutions.

The Project allows to operationalize the postulates of the Law of Education, as well as of the Law of Mother Earth, for the protection of natural resources and the preservation of the environment, in any context because it has the tools and the didactic resources for its implementation.

Teko Kavi's proposal and their experience is a point of reference for the promotion of state policies, at local and regional level, through Eco-literacy for an Environmental Education, which aids in mitigating the effects of climate change.

In order to continue contributing to sustainable development and continue their work, the task of managing and channeling financial support is a joint responsibility of the State, of international cooperation, and of the Teko Kavi Foundation itself.

The continuity of the Project is highly recommended for current environmental issues and to combat climate change since Teko Kavi has a specialized and experienced staff and a proposal with a strategy that has been accepted in other regions in the last couple of years.

The Amazon region in the department of La Paz, is a strategic area for an intervention such as the one given by Teko Kavi. There is an urgent need to develop and implement a project like the one in question in the La Paz region near the National Park of Madidi.

The theme of the Environment especially that of climate change, has become a global priority. In Bolivia, both the State and the civil society, are responsible for taking urgent action in order to address this problem. One concrete way of doing so is by adopting the Eco-literacy program managed by the Teko Kavi's team.

TARGET POPULATION	CHANGES INSPIRED BY THE PROJECT
Civil Society	<ul> <li>They are aware of TK's and EA's work and their proposals</li> <li>Broadcast and exchange experiences between the institutions and the networks that TK participate in</li> </ul>
The Students	<ul> <li>They are aware of environmental issues and its protection</li> <li>Improve their learning by using play-based methods</li> <li>Improve their self-esteem with EA's activities</li> <li>They learn to work as a team</li> <li>They learn to cultivate produce in greenhouses</li> <li>They improve their diet with this produce</li> </ul>
The Teachers	<ul> <li>They are aware of environmental issues and its protection</li> <li>They use play-based methods in their work</li> <li>They create and adapt educational material</li> <li>They improve and enrich their Curricular Development Plans</li> <li>They implement the Education Law's socio-productive community model</li> </ul>

Students at the 'Escuela Superior de Formación Maestros'	<ul> <li>They know and integrate Eco-literacy and its play-based methodology to their education and to their future professional teaching as teachers.</li> </ul>
Parents and Community	<ul> <li>They are aware of environmental issues and its protection</li> <li>They participate in EA activities</li> <li>They work for the protection and the maintenance of the greenhouses</li> <li>They learn to cultivate new produce</li> <li>They participate in school activities</li> <li>They support the local governments</li> </ul>
Community	- Organizes itself and strengthens itself to support the activities promoted by the project in the school.
The State / Municipalities	<ul> <li>Is aware of TK's worth in the schools and the communities</li> <li>Collaborates by providing materials for the school allotments</li> </ul>
Ministry of Education	- Is aware of TK's work and their proposal.

External Limitations	Consequences on the work
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<ul> <li>Restrictions of the Ministry to NGOs, the teacher's fear of sanctions</li> </ul>	- Teachers fear of sanctions, little collaboration when they do not know much about the Project.
<ul> <li>Extra-curricular activities such as training for the Plurinational Sports Event</li> </ul>	- The activities take up a lot of preparation time that affects the school calendar and EA activities
<ul> <li>Low level of teacher training, their resistance to change</li> </ul>	- Little motivation to innovation
- Timetable rotations of the teachers	- Job instability, renovation.
<ul> <li>Migration of youths</li> </ul>	- Incomplete Processes
<ul> <li>Large distances between communities</li> </ul>	- Transportation costs are high and travelling takes up a lot of time

Internal Limitations	Consequences on the work
- Limited budget	It prevents from investing in staff members and equipment. Limited staff members means there is more likely to be malfunctions in the system.

# The main challenges for the institution:

Tasks	Explanation
To implement the project in new regions such as the Amazon area of the department of La Paz, and the east of Bolivia.	Climate change and the protection of the environment are current issues and priorities for sustainable development. TK has experience and has validates their proposal in the last few years on La Paz's altiplano. There exists a demand and an anticipation in other vulnerable regions about climate change. TK and EA can contribute here.
To manage new projects to ensure financial security	It is necessary to invest financial resources to secure the budgets involved in the implementation of the projects.
To establish strategic alliances with organizations within the sector of international collaboration that have an interest in environmental issues, in order to take in new resources.	The State still does not prioritize environmental issues and does not finance these private initiatives, because they have a tight budget.