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**Terminal evaluation of the project
“Conservation and sustainable use of
agrobiodiversity to improve human
nutrition in five macroregions”**

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Abstract

This report presents the results of the terminal evaluation of the project “Conservation and sustainable use of agrobiodiversity to improve human nutrition in five macroregions” of the Food and Agriculture Organization of the United Nations (FAO) and the Global Environment Facility (GEF) GCP/BOL/046/GFF (GEF ID 4577). The evaluation covered the period from the beginning of project implementation in January 2016 to its technical closure in June 2022. The evaluation used mixed methods to compile relevant information, including direct observation through a field mission, the realization of semi-structured interviews, a survey, and a documentation review of internal and external information related to the project.

The results of the evaluation highlight the importance of the project for the Government of the Plurinational State of Bolivia. It aligns with the country’s environmental, rural development and land policies. These recognize the importance of recovering ancestral knowledge and revaluing agrobiodiversity. At the same time, the project promotes conservation and sustainable use. In this regard, the project has made a significant contribution to *in situ* conservation efforts and the sustainable use of agrobiodiversity, and therefore, food security. This was achieved due to the adaptive capacity of the project. In fact, it faced various challenges, including the change in execution modality – from pre-Operational Partners Implementation Modality (OPIM) to direct execution modality (DEX) by FAO – the COVID-19 pandemic and sociopolitical difficulties. There are different initiatives and factors that can ensure the sustainability of the project’s achievements. This, however, requires interinstitutional coordination between the different government agencies with competencies related to agrobiodiversity. The evaluation also highlights the active participation of Indigenous Peoples in the project and its contribution to closing the gender gaps identified as priorities.

The main recommendations include developing and reactivating the government’s high-level mechanisms for the coordination of initiatives and projects on agrobiodiversity; strengthening management plans created to ensure the ecological balance and conserve agrobiodiversity in areas where plant and animal species are used in agriculture; and taking specific actions to strengthen capacities in the analysis of nutritional composition.

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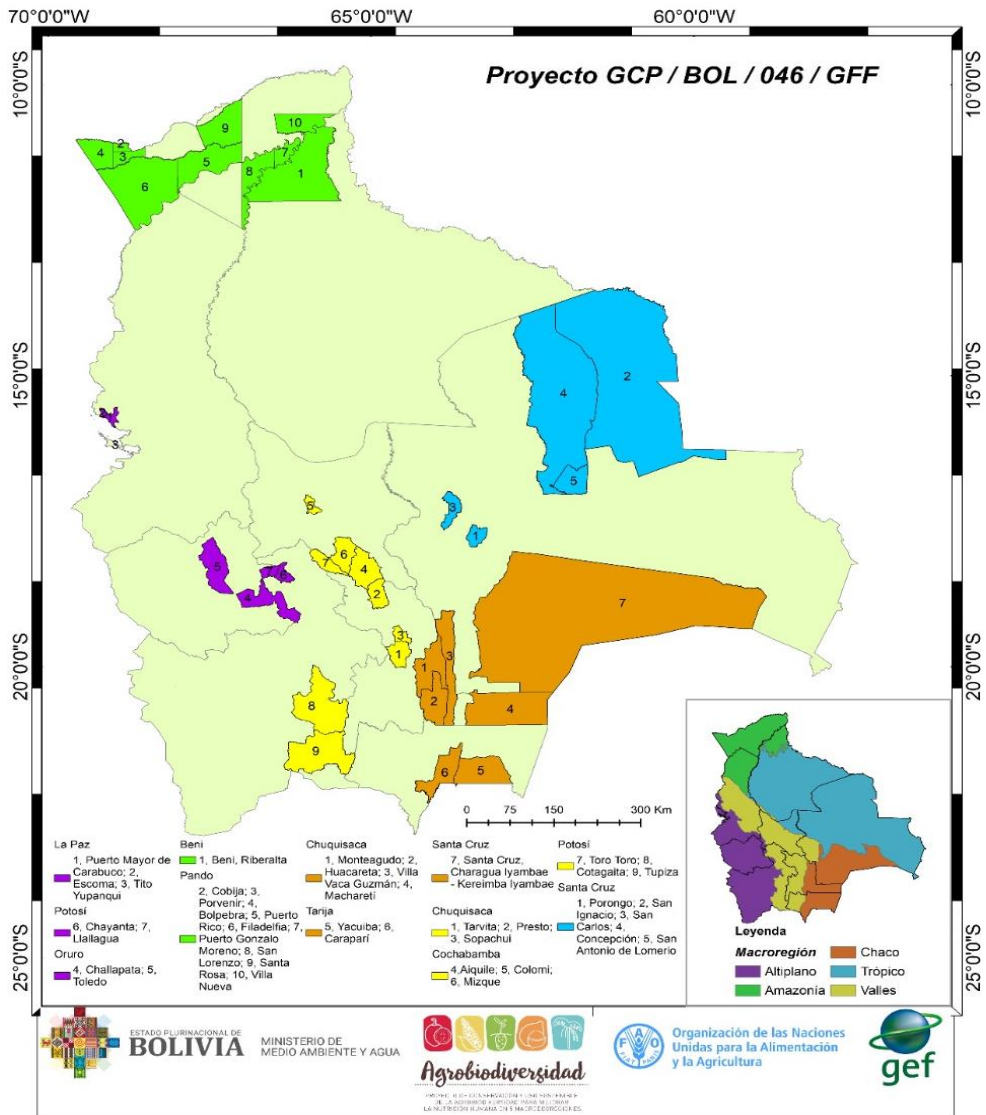
This evaluation benefited from the input of many stakeholders: officers from the national, departmental, and municipal governments and autonomous territorial entities; representatives and members of economic associations; researchers and university professors; and technical units and civil society organizations. Their contributions, which are deeply appreciated, have been a valuable source of information for the work of the teams.

Abbreviations and acronyms

AAGROPAMA	Agricultural Association of Amazonian Outputs of Majo and Asaí Buen Retiro
AFIPA	Forestry Management Association of Agricultural Producers of the Jericó Community
ARPF AE	Association of Collectors and Processors of Amazonian and Exotic Fruits
ARPFAT	Association of Amazonian Fruit Collectors and Processors of Trinchera
ASICOPTA	Association of Harvesters, Producers and Processors of Abuna Fruits
BH	budget holder
CNAPE	National Council of Organic Production
CODAN	Departmental Council for Food and Nutrition
COMAN	Municipal Council for Food and Nutrition
CT-CONAN	Technical Committee of the National Council for Food and Nutrition
DEX	direct execution modality
EFRUSSAL	Agroecological Entrepreneurs of Wild Fruits of San Antonio de Lomerío
EMAGUA	Water and Environment Implementing Entity
FAO	Food and Agriculture Organization of the United Nations
GAIOC	Autonomous Indigenous Peasant Government
GEF	Global Environment Facility
KAP	Knowledge, Attitude and Practice survey
INFOODS	International Network of Food Data Systems
INIAF	National Institute of Agricultural and Forestry Innovation
INLASA	National Institute of Health Laboratories
IPDSA	Decentralized Public Institution for Food Safety
LTO	Lead Technical Officer
M&E	monitoring and evaluation
MTR	mid-term review
NGO	non-governmental organization
OPIM	Operational Partners Implementation Modality
PGS	participatory guarantee system
PIR	Programme Implementation Report
PRODOC	project document
PTF	Project Task Force
SDC	Swiss Agency for Development and Cooperation
SENASAG	National Service of Agricultural Health and Food Safety
SNI AgBD	National Information System on Native Agrobiodiversity, Nutritional Value and Adaptability to Climate Change
TOC	theory of change

Map of the Plurinational State of Bolivia

Project intervention area



Source: FAO. 2021. Work map of the executing team of the FAO project. Map conforms to United Nations 2004. *Bolivia (Plurinational State of)*. <https://www.un.org/geospatial/content/bolivia-plurinational-state>

Executive summary

Introduction

1. This terminal evaluation aims to: (i) report the project results to the Global Environment Facility (GEF), the Food and Agriculture Organization of the United Nations (FAO), the national, departmental and municipal governments that were actors and counterparts in the execution, and the beneficiaries; and (ii) generate and promote learning and knowledge based on results and the exchange – between the GEF and its partners – of the lessons learned as a basis for decision-making on projects, programmes, programme management, policies and strategies to improve performance. These lessons and the knowledge gained will make it possible to scale up the results, ensure sustainability of the processes initiated by the project and provide feedback on the design of new projects. In particular, the evaluation’s objectives identify impacts, evaluate the achievement of the results, generate lessons learned, provide recommendations to disseminate the project results – while ensuring their sustainability and scalability – and determine its contribution to the achievement of global environmental benefits.
2. The project under evaluation is “Conservation and sustainable use of agrobiodiversity to improve human nutrition in five macroregions”. The project began on 14 January 2016 and ended in June 2022. Its general environmental objective was to promote *in situ* conservation of agrobiodiversity in five macroregions of the country and improve the livelihoods of the local population. In addition, its proposed development objective was to manage and harness agrobiodiversity in a sustainable manner, and to strengthen food security through improved access of indigenous populations and local communities to nutritious and diversified diets.
3. The terminal evaluation covered the period from the beginning of the project’s execution in January 2016 to its technical closure in June 2022. The evaluation used mixed methods to triangulate and validate the information compiled from different sources and gather evidence that supported findings, conclusions and recommendations. The methods used were: i) a documentation review of the information generated by the project and a consultation of technical and legal documents external to the project; ii) direct observation through an evaluation mission that took place from 3 to 26 May 2022 in the project’s five macroregions (Amazonia, Chaco, Valles, Altiplano and Trópico); iii) individual and group interviews with 255 people (127 women and 128 men); and iv) a survey of 47 people (21 women, 23 men and 3 people who did not specify their gender) who agreed to participate during the interviews. The methodology applied the evaluation criteria required by the GEF. The findings are based on this.

Main findings

4. Relevance: the project and its results remain relevant. This reflects national priorities to harness ancestral knowledge and value agrobiodiversity, and involves the use and conservation of genetic agrobiodiversity resources and the generation of safe food products with high nutritional value to contribute to food security. It is also aligned with the actions of some departmental and municipal governments that promote the revaluation and sustainable use of agrobiodiversity products, as well as healthy eating. In addition, the project remains relevant to FAO’s strategies and priorities at the country, regional and global levels, which focus on the diversification of food products, promotion of and access to healthy eating, and improved nutrition. Further, the project aligns with

Objective 2 of the GEF-5 biodiversity focal area strategy, which promotes the integration of conservation with the sustainable use of biodiversity. Therefore, the rating for this criteria is highly satisfactory.

5. Effectiveness: the project met its environmental and development objectives by making a significant contribution to *in situ* conservation and the sustainable use of agrobiodiversity in contributing to food security. This was achieved by: i) influencing public policies, mainly at the local level and by supporting the creation of 16 laws; ii) generating knowledge and systematizing the existing information; iii) providing communities with new options for food products with high nutritional value; iv) promoting good practices for the management and use of agrobiodiversity; and v) generating capacities in government and social actors. These achievements are described below.
 - i. Through the execution of Component 1, the project was able to increase the information on agrobiodiversity species. It generated new knowledge on the characteristics and nutritional value of selected agrobiodiversity species and systematized this information, together with existing knowledge on the subject, in the National Information System on Native Agrobiodiversity, Nutritional Value and Adaptability to Climate Change (SNIAgBD). This system is hosted on the servers of the Ministry of Environment and Water, which will be in charge of its operation. However, institutional capacities to determine the nutritional value of agrobiodiversity species need to be strengthened since it was not possible to carry out nutritional analysis based on the international standards of the International Network of Food Data Systems (INFOODS). In addition, at the end of the evaluation, the project was analysing data to determine a possible increase in the consumption of agrobiodiversity products. However, the documents had yet to be uploaded to the system, which was still in a test phase.
 - ii. Regarding Component 2, the project generated and strengthened *in situ* conservation processes of the selected agrobiodiversity species. It also promoted a transformation to increase their value and facilitate their commercialization. This, despite progress, was not homogeneous in all five macroregions. The project achieved *in situ* conservation covering an area of 66 065 ha, significantly exceeding the goal of 6 000 ha (1 214 percent compliance). Of this area, approximately 90 percent represents areas with management plans for wild species in the Amazon.¹ The project also significantly exceeded the goal of area under production standards – in this case, with the certification of organic products through the mechanism of the participatory guarantee system (PGS). The project achieved the certification of 4 858.37 ha (4 231 percent compliance).² During the evaluation's information gathering phase, the documentation was not available to determine the increase in beneficiary family income. However, during the interviews, some

¹ During the review phase of the evaluation report, the project team informed the Evaluation Team that the consolidated figure for the total *in situ* conservation area was 67 093.16 ha.

² During the review phase of the evaluation report, the project team also informed the Evaluation Team that the consolidated certified organic area was 967.17 ha. Also, a reported 939.62 ha of land that did not include prioritized agrobiodiversity species had been certified for family farming. In addition, it indicated that the certified area in the El Palmar protected area is included in the area under management plans to avoid double counting. More details on this are provided in the section on effectiveness.

associations reported an increase in family income. In other cases, it was indicated that this increase was temporary or was only a token amount.³

- iii. Through Component 3, the project achieved the mainstreaming of agrobiodiversity, mainly at the local level, by supporting the generation of 16 laws (533 percent compliance), 14 of which are municipal laws focusing on the creation of the Municipal Councils for Food and Nutrition (COMANs), healthy eating and the declaration of agrobiodiversity as strategically important or as natural heritage. The other two are departmental laws. One declares the algarrobo (genus *Prosopis*) as part of the nation's natural heritage, and another on productive agricultural development promotes agrobiodiversity. At the national level, the project contributed to the issuance of a Ministerial Resolution for the Promotion of Maize as a Phylogenetic Resource, as well as the inclusion of agrobiodiversity in the working groups of the National Council for Food and Nutrition. However, the project had limited influence on the working groups. According to the Policy Framework Section of the GEF tracking tool, it is estimated that the project will achieve a score of 7 points out of 10. Although some laws have begun to be implemented, even without the issuance of their respective regulations, the point of verifying and monitoring compliance with these laws has not been reached. Therefore, the expected rating was not achieved.
- iv. As part of Component 4, the project implemented communications strategies using digital and traditional media channels to achieve national coverage, mainly through mainstream media due to the COVID-19 pandemic. The use of local television and radio stations, and participation in fairs related to agrobiodiversity, allowed the project to reach distant populations and, in some cases, with targeted content. The main goal of these communications was to raise awareness among institutional staff, producers and consumers about the importance of conservation and the benefits of agrobiodiversity. During the review phase of the evaluation report, the Evaluation Team was informed that the results obtained from the second Knowledge, Attitude and Practice (KAP) survey showed an increase in the recognition of the term agrobiodiversity and, as in the first KAP survey, all participants recognized the importance of agrobiodiversity for food security and the economy.
- v. Global environmental benefits were generated, such as *in situ* conservation of agrobiodiversity, its incorporation into regulatory frameworks, income generation and an increase in the level of awareness about agrobiodiversity and its importance.
- vi. The project also generated important co-benefits, such as the proposal for the National Programme for the Sustainable Management of Agrobiodiversity 2022–2027, which would be implemented under the responsibility of the Ministry of Environment and Water. It also promoted the adaptation of a reference standard for laboratory tests and work on specific standards for moriche palm (*Mauritia flexuosa*) and majo (*Oenocarpus bataua*) pulp within the framework of the National Agricultural Health and Food Safety Service. In addition, it is important to highlight the co-benefit reported in the GEF tracking tool, particularly the invasive species section. In fact, the project, through the update of the management plan in the EI

³ In the final phase of the evaluation, the project team reported to the Evaluation Team that the estimated average income was USD 316 per year per family for 2 660 families in the different links of the production chain. This would mean that the adjusted results framework target of USD 216 per year per family was exceeded. However, the Evaluation Team identified methodological differences in the sampling method, geographic coverage, and sample size between the initial and final surveys carried out.

Palmar ecological reserve, contributed to the control and management of exotic species such as pine and eucalyptus. Considering the level of achievement of the project, the rating for this criteria is satisfactory.

6. Efficiency: the project started under the pre-Operational Partners Implementation Modality (OPIM), meaning it was designed before the OPIM rules were published. However, the progress of the project was limited under this modality due to administrative difficulties of the Ministry of Environment and Water (the operating partner). Further, in 2018, the project steering committee decided to switch to the direct execution modality (DEX) managed by FAO Bolivia. The change made it possible to substantially improve technical and operational execution considering the highly effective adaptive measures that had been implemented. However, the governance of the project could have been more effective since limited attention was placed on the functioning of the steering and technical committees in both implementation modalities. This indicated a lack of effective shared governance between the Ministry of Environment and Water and FAO. In addition, the Ministry of Rural Development and Land, which has jurisdiction over the issues addressed by the project, did not participate in the steering committee nor the activities mentioned in the project document (PRODOC). However, interinstitutional collaboration occurred through local government entities, generating important benefits. The rating for this criteria is moderately satisfactory.
7. Sustainability: a high level of project ownership was generated by the Ministry of Environment and Water. The ministry accepted the development of the proposal for the National Programme for the Sustainable Management of Agrobiodiversity 2022–2027. This would give continuity to the project achievements. The proposal still requires the final approval of the Bolivian Government and the project funder, in addition to the fact that some areas for improvement have been identified. For example, an institutional risk was identified in terms of the duplication of efforts and a non-optimal use of resources in the conservation of agrobiodiversity. This was due to a lack of interinstitutional coordination at the national level. At the municipal level and among the project's beneficiary groups, a high degree of ownership was generated, although basic unmet needs were evident. Individual and organizational capacities were generated in these beneficiary groups, as well as the formation of a favourable environment for project implementation. These, however, were not in a homogeneous manner in the five macroregions. FAO will also contribute to the sustainability of the achievements made with these groups through ongoing and future initiatives. Regarding environmental sustainability, environmental awareness was identified among collectors and producers of agrobiodiversity species, and management plans focused on *in situ* conservation were generated. An opportunity was also identified to improve some of these plans and mitigate the risk of affecting the ecological balance of the areas where they would be implemented. Therefore, the rating for the sustainability criteria is moderately likely.
8. Factors affecting performance: the monitoring and evaluation (M&E) plan included the necessary elements to monitor the project. However, areas for improvement were found in the design of the results framework. This made the project's M&E progress more complex due to the lack of specificity of some indicators and goals. The plan was not fully implemented due to the modality change and the COVID-19 pandemic. Under the DEX modality, a comprehensive monitoring system was implemented. This reflected the areas of improvement that had been identified in the results framework. The rating for this aspect is moderately satisfactory. Execution under the pre-OPIM modality was not effective due

to the lack of clarity on the requirements for operational partners. For its part, the implementation under the DEX modality was based on strategic coordination, results-based management and adaptive capacity. However, it did not foster the capacity strengthening among the Ministry of Environment and Water. The rating for the execution under both modalities is moderately satisfactory. In terms of financial management, the project team faced some complications in the pre-OPIM phase due to the lack of experience of the executing partner in this type of project. In the direct execution phase, the use of resources was managed effectively. This, however, was affected by external factors such as the COVID-19 pandemic and sociopolitical events. Therefore, the financial management criteria is rated as satisfactory. Of the total co-financing committed, 63.5 percent was received. The additional resources obtained represented 9.5 percent (USD 1 335 867) of the committed co-financing. Therefore, the co-financing criteria is rated as moderately satisfactory.

9. Project partnerships and stakeholder engagement were highly successful. Academic institutions, non-governmental organizations (NGOs) and municipal governments joined to contribute to the project's achievements. The rating for this criteria is highly satisfactory.
10. Gender and minority groups, including Indigenous Peoples: the project included a gender approach in its design and implementation. This helped to close priority gender gaps, such as unequal access to and control of natural resources, and the lack of equality in participation and decision-making. This advance is significant and will require greater efforts to consolidate the progress achieved by the project. The rating for the gender issue is satisfactory. In addition, the indigenous communities were consulted in an appropriate manner through the mechanisms created by the project, which were based on FAO's policy on Indigenous Peoples. The customs, traditions and norms of Indigenous Peoples were respected at all times. Indigenous Peoples, including indigenous women, actively participated in the project. The recovery of indigenous knowledge and practices related to crops, forest products and traditional foods has also been highlighted in the project's publications. This represents a cultural benefit of the project. The rating for the criteria of Indigenous Peoples is highly satisfactory.
11. The project has contributed significantly to knowledge management. In fact, it includes a specific component regarding this aspect. The project created an information system on agrobiodiversity; published three documents, including the book, *The diversity of native maize in Bolivia* (Santos et al., 2021); systematized and disseminated ancestral knowledge about agrobiodiversity products; and generated a knowledge exchange between regions. Therefore, this criteria is rated as highly satisfactory. For its part, the communications criteria is rated as moderately satisfactory. Although there was a communications strategy, the project did not measure its effectiveness by measuring increase in awareness of the importance and benefits of agrobiodiversity, as was required.
12. Environmental and social safeguards: since the project had been formulated before the guidelines on completing an environmental impact assessment of FAO field projects were published, the project was not categorized according to its risk. In any case, given its environmental and development objective, the project did not generate any collateral consequences, as confirmed during the evaluation mission. However, an environmental risk was identified in some management plans. These promote the growth of native species of commercial value in forests without specifying the necessary measures to protect their ecological balance.

Conclusions

Conclusion 1. The project is aligned with the policies and programmes of the Bolivian Government, with FAO's priorities and strategies at the national, regional and global levels, and with Objective 2 of the GEF-5 biodiversity focal area.

Conclusion 2. The project contributed significantly to *in situ* conservation of agrobiodiversity and its sustainable use, thus enabling greater opportunities for food security in the peasant and indigenous communities affected by the project.

Conclusion 3. The project began under the pre-OPIM execution modality, which was ineffective. As a result, FAO replaced it with the DEX modality, which proved to be highly effective, despite limiting active involvement on behalf of the governmental partner.

Conclusion 4. Although the project was successful in generating interinstitutional coordination at the local level, this must be strengthened at the national level, mainly with the Ministry of Rural Development and Land.

Conclusion 5. The project generated a high level of ownership of its results and strengthened capacities at different levels. However, some institutional and environmental risks have been identified that need to be mitigated to ensure the full sustainability of the project results.

Conclusion 6. It was possible to materialize 63 percent of the committed co-financing (USD 8.9 million) without affecting the project results. Additional co-financing also represented 9.5 percent of the committed co-financing.

Conclusion 7. The identification of more key actors in addition to those included in the PRODOC, as well as the collaboration and participation mechanisms implemented by the project, contributed significantly to the achievements and to obtaining additional co-financing.

Conclusion 8. The project has made an important contribution to knowledge management on agrobiodiversity by incorporating a specific component related to this aspect. It included the creation of an information system on agrobiodiversity, as well as the recovery of ancestral knowledge and its systematization through various publications.

Conclusion 9. The project included a gender approach in its design and implementation to close priority gender gaps. This advance is significant, but greater efforts are needed to consolidate the project's progress.

Conclusion 10. Indigenous Peoples, including indigenous women, actively participated in the project. They were consulted in an appropriate manner that respected their customs, traditions and norms at all times.

Conclusion 11. No adverse social or environmental effects were identified during project execution. However, there is a potential environmental risk that will have to be addressed in some management plans to ensure the functionality of the forests where agrobiodiversity species are located.

Recommendations

Recommendation 1. For the Ministry of Development Planning and FAO. Considering the overlapping agrobiodiversity competencies of the Ministry of Environment and Water, the Ministry of Rural Development and Land, the Ministry of Health, and the Ministry of Productive Development and Plural Economy, as well as the specific benefits of the project and the existence of high-level interinstitutional coordination, it is suggested that the government develop and

reactivate mechanisms to coordinate initiatives and projects on agrobiodiversity by different government institutions. Here, FAO can play a mediating role.

Recommendation 2. For the Ministry of Environment and Water and FAO. Given the synergies that the National Agrobiodiversity Programme, once approved, could trigger with other ministries and the advantages generated by the optimization of resources, the proposal for the National Agrobiodiversity Programme should be strengthened by including other advances in the subject. Specifically, the proposal should indicate which actions require the participation of other ministries and their corresponding technical areas, as well as the coordination and collaboration mechanisms to be used. In addition, a consumer awareness raising campaign should be suggested in the proposal.

Recommendation 3. For the Ministry of Environment and Water and FAO. Although the management plans created include measures for the conservation and sustainable use of wild species, there are some that indicate the production of seedlings in nurseries and the reintroduction of wild species of commercial value without specifying their scope. This generates an environmental risk that could affect the ecological balance of forests. Therefore, it is recommended to review and strengthen these management plans through a landscape approach.

Recommendation 4. For the Ministry of Environment and Water and FAO. The PRODOC recognizes that the project is linked to several areas under the responsibility of the Ministry of Rural Development and Land, requiring important tasks. However, the ministry was not assigned a specific role in the project or considered a co-financer. At the start of execution, the Ministry of Rural Development and Land decided not to participate in the project. This prevented the expected synergies between the Ministry of Rural Development and Land and the Ministry of Environment and Water from being generated. Therefore, for similar projects, a strategic role should be given to ministries that have important competencies related to the results of the project (for example, as executing and co-financing partner) so that they can take on greater responsibility in the project and benefit equally from its results.

Recommendation 5. For the Ministry of Environment and Water and FAO. Since the evaluation mission identified that some projects and initiatives of the Ministry of Environment and Water may not have been accounted for in the co-financing reported by the project, a meeting between the ministry and FAO should be arranged to review the projects and initiatives that are being carried out by the ministry and that also contribute to the conservation and sustainable use of agrobiodiversity.

Recommendation 6. For the Ministry of Environment and Water and FAO. In order to contribute to the sustainability of the achieved project results, it is suggested that the initiatives in progress or to be implemented in the future be prioritized as follows:

- i. Ensure that all the food products generated within the project framework have food safety and ecological certifications and that the associations are registered legal entities. In addition, an awareness raising campaign should be designed and implemented to promote the consumption of products by local communities.
- ii. Continue the training process for the National Institute of Health Laboratories (INLASA). Complement the analysis of the nutritional composition carried out within the project framework in order to advance the fulfilment of the INFOODS requirements.

Recommendation 7. For the Ministry of Environment and Water and FAO. Continue providing associations and organizations with courses on gender equality and promote innovation in ventures where women can diversify their participation. These efforts aim to advance a gender

inclusive approach in existing productive enterprises, as well as those generated through the National Agrobiodiversity Programme and other initiatives, and avoids perpetuating the traditional role of women.

Executive Summary Table 1. GEF evaluation criteria rating table

GEF criteria/subcriteria	Rating	Summary comments
A. STRATEGIC RELEVANCE		
A1. Overall strategic relevance	HS	The project addresses agrobiodiversity. This is highly relevant for food security and biodiversity conservation, and links these aspects to the recovery and revaluation of indigenous knowledge.
A1.1 Alignment with GEF and FAO strategic priorities	S	The project aligns with FAO priorities on food diversification and improved nutrition. It also aligns with the GEF-5 Biodiversity Focal Area, especially the goal of integrating conservation with the sustainable use of biodiversity.
A1.2 Relevance to national, regional and global priorities and beneficiary needs	HS	The project aligns with the policies and strategies of different ministries of the Bolivian Government on the conservation and use of biodiversity and food security. Also, necessary consultations with beneficiaries upon project launch contributed to addressing some of their priority needs.
A1.3 Complementarity with existing interventions	MS	Since the issues addressed by the project are priorities, actions were complemented by existing government interventions, as well as FAO initiatives and projects. However, the synergies generated with the Ministry of Rural Development and Land were limited.
B. EFFECTIVENESS		
B1. Overall assessment of project results	S	The project results met the objectives.
B1.1 Delivery of project outputs	S	The project achieved most of the expected outputs and, in some cases, the goals were significantly exceeded. However, in one case, it was not possible to measure the level of compliance. This is because the final information was not available (increase in income). In another case, the project did not generate the required information.
B1.2 Progress towards outcomes and project objectives	S	The progress towards outcomes is satisfactory. Some goals were exceeded. Although the level of compliance could not be determined for some outcomes, the progress observed through the work carried out indicates that the project is on the right track. In addition, there is evidence that the project has contributed to food security and the conservation and use of agrobiodiversity.
- Outcome 1.1	MS	The level of achievement of the goal was 80 percent. More documents were produced than required. However, these documents have not been uploaded to the information system, per the objective.
- Outcome 2.1	HS	The level of achievement of the goal was estimated at 1 214 percent since a greater area

GEF criteria/subcriteria	Rating	Summary comments
		was covered under a conservation and sustainable use scheme.
- Outcome 2.2.a	UA	The level of income resulting from the intervention was surveyed to compare it with a baseline level. The results, though, were not available during the data collection phase of the evaluation. During the review of the evaluation report, the project team informed the Evaluation Team that the survey had already been completed and that an average income of USD 316 per year per family had been obtained – exceeding the goal. However, the Evaluation Team has doubts on the methodology used in the initial and final surveys.
- Outcome 2.2.b	HS	The level of achievement of the goal was estimated at 4 231 percent. The number of hectares certified under organic production standards greatly exceeded the goal.
- Outcome 3.1	MS	According to the Evaluation Team’s estimate, the project reached 70 percent of the goal for this outcome: 7 points out of 10 were achieved in the Regulatory Framework Section of the GEF tracking tool.
- Outcome 4.1	UA	This outcome focused on reaching at least a 30 percent level of awareness of the importance of agrobiodiversity. However, the project did not include the measurement of this level of awareness. As a result, there is no data to determine the progress towards the goal. During the review of the evaluation report, the project team informed the Evaluation Team about the results of the second KAP survey, which showed an increase in awareness of agrobiodiversity and its importance. However, since the use of additional or different variables was reported in the second KAP and the survey results were not shared with the Evaluation Team, it was difficult to determine if the 30 percent increase in the level of awareness was achieved, as established in the results framework. That is, the Evaluation Team identified an increase in the level of awareness but could not determine the level of the increase.
- Overall rating of progress towards achieving objectives/outcomes	S	Some goals were not 100 percent achieved, and the level of achievement of some outcomes was impossible to determine. In any case, it is important to highlight that certain key goals, such as the total area of land protected under a conservation scheme – which was monitored through the GEF tracking tool – were exceeded.
B1.3 Likelihood of impact	S	The evidence shows that the outcomes achieved have contributed to reactivating and, in some cases, strengthening the supply of traditional fruits and vegetables. This includes their transformation into products with high nutritional

GEF criteria/subcriteria	Rating	Summary comments
		value. However, it is necessary to ensure the sustainability of this supply.
C. EFFICIENCY		
C1. Efficiency	MS	Although the efficiency of the project was low during the pre-OPIM implementation phase, it later increased with the change of execution modality. This change in modality, the COVID-19 pandemic and sociopolitical problems represented important challenges that were overcome thanks to the implementation of highly effective adaptive measures. As a result, however, the project had to be extended for two and a half years where it then achieved most of the expected products. The interinstitutional coordination with the Ministry of Rural Development and Land occurred in a timely manner to generate important benefits in the field. However, it is considered that the benefits would have been greater if the ministry had been actively involved in the project.
D. SUSTAINABILITY OF PROJECT OUTCOMES		
D1. Overall likelihood of risks to sustainability	ML	The risks identified are mainly institutional and environmental, which can be mitigated through the initiatives proposed in the project closure strategy and through attention to the recommendations of this evaluation.
D1.1 Financial risks	ML	There is a proposal from the National Agrobiodiversity Programme that would ensure the continuity of the project achievements with an estimated budget of USD 11 million. However, the programme has not been authorized by the relevant authority or approved by the funding agency.
D1.2 Sociopolitical risks	ML	A high level of ownership was shown by the project beneficiaries, even though the level of progress was not homogeneous among the participating associations and all expressed important unmet needs. Therefore, it is necessary to continue providing support and strengthening the progress achieved by the project.
D1.3 Institutional and governance risks	MU	There needs to be interinstitutional coordination at the national level between the ministries that influence agrobiodiversity. There is a risk that some actions by certain ministries could undermine the project's achievements.
D1.4 Environmental risks	ML	Management plans were generated with measures that allow for the conservation of agrobiodiversity. However, some of these plans need to be strengthened to mitigate the environmental risk that could affect the functionality of the ecosystems in some of the project intervention areas.
D2. Catalysis and replication	L	The National Agrobiodiversity Plan proposal includes the expansion of the project's coverage

GEF criteria/subcriteria	Rating	Summary comments
		to other municipalities, thereby increasing the area of intervention.
E. FACTORS AFFECTING PERFORMANCE		
E1. Project design and readiness	MU	The project presents a vertical logic in its structure. However, the results framework turned out to be complex and ambitious. Considering the overlapping competencies of the Ministry of Rural Development and Land with the project actions, the ministry would have been expected to play a more strategic role in its design.
E2. Quality of project implementation	MS	The pre-OPIM implementation phase was ineffective. However, the direct implementation by FAO was very effective, and this contributed significantly to the achievement of the outcomes.
E2.1 Quality of project implementation by FAO (budget holder [BH], Lead Technical Officer [LTO], Project Task Force [PTF], etc.)	MS	Project supervision in general terms was adequate. Some management plans that require technical strengthening were identified. In addition, the Programme Implementation Report (PIR) needs to be reviewed and completed, mainly the section on environmental and social safeguards. There were two changes of LTO, but there was not an adequate transfer of information when the changes took place.
E2.2 Project oversight (project steering committee, project working group, etc.)	MU	The project gave little importance to the steering and technical committees. In some years, no committee meetings were held. According to the PRODOC, these were the main decision-making bodies for the project.
E3. Quality of project execution For decentralized projects: Project Management Unit/BH For OPIM projects: executing agency	MS	During the pre-OPIM implementation phase, the quality of execution was affected by complex and lengthy procurement processes for goods and services. With the change of modality to direct execution, the quality of execution improved due to strategic coordination, intensive monitoring and results-based management.
E4. Financial management and co-financing	MS	The financial management of the project faced some complications in the pre-OPIM phase due to the executing partner's lack of experience in this type of project. In the direct execution phase, no observations regarding financial management were identified. Of the total co-financing committed, 63 percent was received. However, additional co-financing was obtained and no negative effect from the level of compliance with the co-financing committed was observed.
E5. Project partnerships and stakeholder engagement	HS	The participation and involvement mechanisms of academia, civil society organizations, the private sector and government (mainly at the local level) were highly successful. This contributed to the achievement of outcomes and to obtaining additional co-financing.
E6. Communications, knowledge management and knowledge products	HS	Components 1 and 2 of the project focused on knowledge generation and management. This included the generation of new knowledge and

GEF criteria/subcriteria	Rating	Summary comments
		the systematization of existing knowledge in an information system, which is still in the testing phase, and in publications that highlight the knowledge of indigenous communities.
E7. Overall quality of M&E	MS	There is no evidence that any monitoring system was implemented under the pre-OPIM modality. In the DEX phase, a detailed monitoring system was developed to reflect the complexity of the results framework. It was also useful in conducting results-based management.
E7.1 M&E design	S	The M&E plan outlined in the PRODOC complies with GEF requirements.
E7.2 M&E implementation plan (including financial and human resources)	MS	The M&E plan was implemented nearly in full. There was only one technical supervision visit that could not be carried out due, in part, to the COVID-19 pandemic. The project monitoring system reflected the complexity of the results framework, and the reported PIRs showed areas for improvement.
E8. Overall assessment of factors affecting performance	MS	Although each factor discussed above showed areas for improvement, these did not have a significant effect on the achievement of project outcomes.
F. CROSS-CUTTING CONCERNS		
F1. Gender and other equity dimensions	S	The project contributed to closing priority gender gaps.
F2. Human rights issues/Indigenous Peoples	S	The project carried out the necessary consultations with the indigenous communities. It respected their traditions, customs and norms at all times.
F3. Environmental and social safeguards	MS	At the time of project formulation, the environmental impact assessment was not requested. However, given the nature of the project, no environmental or social impact was identified or observed as a result of project execution. A potential environmental risk was identified that should be addressed in connection with management plans. The reporting of this section in the PIRs was confusing.
Overall project rating	HS	The project faced important challenges during its execution (execution modality change, the COVID-19 pandemic and sociopolitical problems within the country). These were addressed in a highly effective way through adaptive measures. This allowed the project to achieve the majority of its objectives and expected environmental benefits. In some cases, the goals established in the plan were exceeded.

1. Introduction

1.1 Purpose of the evaluation

1. The terminal evaluation was considered in the project document (PRODOC), in accordance with the requirements of the Global Environment Facility (GEF) and the Food and Agriculture Organization of the United Nations (FAO). The evaluation was carried out with a dual purpose. It serves to provide accountability to the donor (GEF) and the national, regional, and municipal governments and other actors that have been counterparts in co-financing and execution. In addition, this evaluation has a learning purpose. In the process of assessing the achievement of results, lessons learned were identified to promote the sustainability and scalability of the results, and to ensure the continuity of the processes initiated by the project. In addition, the findings provide evidence for the design of new projects based on the lessons learned and recommendations.

1.2 Intended users

2. The intended users of this evaluation, as well as the intended uses, are shown in Table 1.

Table 1. Users and uses of the evaluation

User	Expected use
Ministry of Environment and Water, including the Water and Environment Implementing Entity (EMAGUA) and the General Directorate of Biodiversity and Protected Areas	The findings, recommendations, good practices and lessons learned derived from the evaluation may be internalized and used to strengthen the design and execution of similar interventions. They may also be used as evidence to strengthen the regulations that govern the procurement processes for goods and services, and as inputs to strengthen the design and implementation of the National Agrobiodiversity Programme proposal.
Ministry of Rural Development and Land and its technical or operational entities	The results of the evaluation can be used to demonstrate the benefits of collaboration with the Ministry of Environment and Water, as well as for the design and execution of similar interventions.
Technical Committee of the National Council for Food and Nutrition (CT-CONAN), the National Institute of Health Laboratories (INLASA) and other ministries	The CT-CONAN, the Ministry of Health and the Ministry of Productive Development and Plural Economy could use the results of the evaluation to analyse project performance and consider the recommendations, good practices and lessons learned for future collaborations with the Ministry of Environment and Water. The results can also be used to coordinate actions within the framework of the CT-CONAN on government initiatives related to agrobiodiversity. In addition, INLASA could use the results of the evaluation to continue strengthening its capacities to carry out nutritional analysis.
FAO	The findings, recommendations, good practices and lessons learned derived from the evaluation may be internalized and used to strengthen the design and execution of similar interventions in FAO Bolivia, as well as provide guidance for ongoing and future initiatives that promote the sustainability of the project outcomes.
FAO-GEF Coordination Unit	The recommendations, good practices and lessons learned could be useful for the continuing improvement of the design of similar projects for the GEF, as well as in the Operational Partners Implementation Modality (OPIM) and direct execution modality (DEX) implemented by FAO.

Municipal and departmental governments and civil society organizations	The results of the evaluation may be used to guide ongoing and future initiatives related to agrobiodiversity.
Universities and technical centres	The results of the evaluation may be used to determine the impact of their contribution to the project and consider good practices and lessons learned for future collaborations.
Organizations and associations benefiting from the project	The results of the evaluation could be useful to analyse the performance of the project and follow up on the recommendations aimed at promoting the sustainability of the benefits obtained.

Source: Elaborated by the Evaluation Team.

1.3 Scope and objectives of the evaluation

1.3.1 Scope

3. The terminal evaluation focuses on the evaluation criteria and aspects proposed by the GEF, which were translated into the evaluation questions included in Table 2. The evaluation covers the entire project cycle, from its inception (January 2016) to the assessment data collection date (June 2022). Therefore, all project activities and components implemented up to that date were reviewed, and the findings and recommendations of the mid-term review (MTR) were taken into consideration. The evaluation considers all groups of partners and counterparts involved in the project at the different levels of implementation in the different macroregions of the country.
4. Regarding the geographical coverage of the evaluation, it includes the five macroregions in which the project was implemented: Altiplano, Valles, Trópico/Llanos, Chaco and Amazonia, in addition to the city of La Paz, where the national government offices and FAO Bolivia are located.

1.3.2 Objective

5. According to the PRODOC, the main objective of the terminal evaluation is as follows:
6. "...identify the impacts of the project and the sustainability of the results and the degree of achievement of the results in the long term. This evaluation should also have the purpose of demonstrating the actions needed in the future to sustain the results of the project, expand the existing project in later phases, position and expand its products and practices, and disseminate information to the authorities responsible for *in situ* and *ex situ* conservation and use of agrobiodiversity in the Plurinational State of Bolivia, in order to ensure the continuity of the processes initiated by the project."
7. The terminal evaluation analyses the results achieved by the project. There is an emphasis on the changes arising from the MTR. It should be structured based on these areas of analysis, as proposed by the GEF guidelines for terminal evaluations. The GEF guidelines for terminal evaluations (GEF, 2017) include four analysis criteria and ten factors that affect project performance, indicating which areas should be rated by the evaluators.
8. Other relevant aspects analysed in this evaluation and highlighted in the PRODOC are:
 - i. the level of representation and participation of farmers in protection, sustainable use practices and the application of management plans for *in situ* conservation;

- ii. the level of understanding among local communities of climate change adaptation and the agroecological benefits of agrobiodiversity conservation and sustainable use practices;
- iii. the level of understanding among local communities of the benefits of cultivating ecotypes with high nutritional value;
- iv. the increase in diet diversification and level of inclusion of the new species in the diet;
- v. the number of communities and families that participate in *in situ* conservation of agrobiodiversity, the adoption of technologies for biodiversity conservation and the identification of new good practices;
- vi. the degree to which the project has managed to create synergies with the National Institute of Agricultural and Forestry Innovation (INIAF) programme and link management plans for *in situ* conservation with improved seed supply systems supported by INIAF, as well as creation of links and synergies between *in situ* and *ex situ* conservation strategies in the national network of germplasm banks managed by INIAF;
- vii. the level of capacities created in the communities to promote and market agrobiodiversity products, the sustainability of the links created with the market and the increase in income generated; and
- viii. the level of inclusion of the selected species in policies, programmes and projects for food security and school meals.

Table 2. Evaluation questions by GEF criteria

1) Relevance	<p>Have the results of the project been (and will they continue to be) consistent with the focal areas and operational strategies of the GEF, national priorities and the FAO Country Programming Framework, as well as the needs of the beneficiaries?</p> <p>Was the project design appropriate to deliver the expected results? Consider the components and geographic coverage.</p> <p>Were there changes in the relevance of the project (e.g. new national policies, plans or programmes) from its design to implementation that affected the relevance of the project objectives? How effective was the project's adaptability in addressing these changes?</p>
2) Effectiveness – achievement of project results	<p>What results (intended and unintended) has the project achieved? To what extent did they contribute to the achievement of environmental and development objectives?</p> <p>To what extent do the results achieved by the project correspond to the expected results?</p> <p>What opportunities and/or challenges contributed to and/or limited the achievement of the results?</p> <p>What preliminary impacts can be identified as a result of the project? To what extent can progress towards these impacts be attributed to the project?</p> <p>Are there barriers or risks that may prevent further progress towards long-term impacts?</p>
3) Efficiency	<p>Have the implementation modalities, the institutional structure, and the available financial, technical, programmatic and operational resources and procedures contributed to or hindered the achievement of the results and objectives of the project?</p> <p>Has the project management team been able to adapt to the specific contextual conditions (changes in government and/or policies, COVID-19, implementation modality, changes in the project team, etc.) to implement the project efficiently?</p> <p>OPIM/DEX:</p> <p>To what extent were the specific features of OPIM considered during project design preparation (e.g. operational procedures and capacity of operational partners). Was OPIM anticipated to be an effective and efficient implementation model?</p> <p>To what extent did the project governance structure (OPIM and DEX) facilitate project execution and contribute to project objectives?</p> <p>What results were achieved due to the change of implementation modality from OPIM to DEX? What aspects are valued in each of the modalities? What were the challenges and successes of each of the operational modalities?</p>
4) Sustainability	<p>How sustainable are the results achieved at the environmental, social, institutional and financial levels?</p> <p>What aspects must be strengthened to ensure the continuity of the processes initiated by the project?</p> <p>What are the key risks that may affect the sustainability of project achievements?</p> <p>Did the capacity development activities of the project adopt an integrated approach at the individual and organizational levels to foster a favourable environment for their implementation?</p> <p>What evidence is there that the beneficiaries at the community and regional levels have acquired greater capacities in terms of conservation and sustainable use of agrobiodiversity? Is there evidence that these capacities have been incorporated into the institutional framework at the community and regional levels?</p>
5) Factors affecting performance	Project design and start up

	<p>Was the project structure adequate to meet its objectives? Were there any aspects of the design that affected the performance of the project?</p> <p>Monitoring and evaluation</p> <p>Monitoring and evaluation (M&E) design: Has the M&E plan been adequate?</p> <p>M&E implementation: Has the M&E system functioned according to the M&E plan? Has the information been collected systematically, using appropriate methodologies? Has the information from the M&E system been used adequately to make timely decisions and promote learning during the execution of the project?</p> <p>Quality of implementation</p> <p>To what extent was FAO compliant in project identification, concept note preparation, approval, start up, monitoring and supervision? How effective was the context analysis and risk identification and management?</p> <p>Did the OPIM modality provide quality financial reports, project progress reports and Programme Implementation Reports (PIRs)? Were the funds reported in a timely manner per the terms and conditions of the signed operational partner agreement?</p> <p>What is the role of FAO as executing agency (monitoring, supervision and guidance) in an OPIM modality? (Focus on FAO's monitoring role and the technical quality of the operational partner.) To what extent has FAO reviewed/approved the reports and organized the transfer of funds in a timely manner under the OPIM modality?</p> <p>To what extent has FAO provided support with corrective actions to address weaknesses identified during project implementation? Does FAO respond to inquiries and provide technical assistance in a timely manner? Is the project team trained to carry out this task?</p> <p>Quality of execution</p> <p>What effects did the change in the executing agency have on the implementation of activities and the achievement of results? To what extent has FAO, as executing agency, fulfilled the functions related to the management and administration of the project effectively?</p> <p>Financial management and mobilization of expected co-financing</p> <p>To what extent has the planned co-financing materialized and how has the lower-than-expected co-financing affected project results?</p> <p>Project partnerships and stakeholder engagement</p> <p>How have other actors, such as civil society organizations, Indigenous Peoples or the private sector, been involved in the design or implementation of the project, and how has this affected the results?</p> <p>How is the level and quality of participation and involvement of key partners and counterparts assessed?</p> <p>Knowledge management, communications and knowledge products</p> <p>How is the project evaluating, documenting and sharing its results, lessons learned and experiences? To what extent can the communications products and activities support the sustainability and scalability of the project results?</p>
6) Gender	<p>To what extent were gender considerations taken into account in the design, implementation and monitoring of the project?</p> <p>Was the project implemented in a way that guaranteed gender equality in participation and benefits, thereby contributing to the empowerment of women?</p> <p>How adequate and pertinent was the monitoring and evaluation of the actions to determine the results in terms of gender issues?</p>

7) Minority groups/Indigenous Peoples	To what extent have the rights of Indigenous Peoples been respected and promoted in the design, decision-making and implementation of the project?
8) Environmental and social safeguard risks	To what extent have environmental and social issues been taken into account in project design and implementation? What have been the effects of the measures taken during the implementation of the project in terms of environmental and social safeguards?
9) Lessons learned	What knowledge and/or evidence has been generated based on the project results and experiences that has the potential for broader implementation, replication and use at the local, national and regional levels? What lessons can be learned from the design, management and implementation of the project that can be useful to ensure the continuity of the processes initiated by the project, and improve the design and implementation of current and future interventions – and in terms of strengthening the GEF project portfolio?

Source: Elaborated by the Evaluation Team, based on the PRODOC.

1.4 Methodology

9. The evaluation is guided by the norms and standards of the United Nations Evaluation Group (UNEG, 2005), the GEF guidelines for conducting terminal evaluations (GEF, 2017), and the procedures and methodological guidelines of the FAO Office of Evaluation (FAO, 2019), which are aligned with these norms and standards. In addition, the criteria and requirements established by the GEF for terminal evaluations have been met in accordance with the terms of reference of this evaluation. In particular, the process has been implemented in close collaboration with FAO Bolivia and key project partners and counterparts.
10. Consultations with the interested parties followed ethical guidelines to ensure that their participation was safe, non-discriminatory and respectful. In particular, special attention was paid to ensure that women and indigenous groups were adequately consulted. Participation was voluntary and all information provided was treated confidentially.
11. The evaluation followed a theory of change (TOC) approach with an emphasis on the results chain. The TOC approach was used to capture the causal relationship between inputs, expected outputs detailed in the project results framework, the outcomes to which these should contribute, and the conditions under which they should occur. The Evaluation Team adapted the TOC developed during the MTR, which is presented in Figure 1.
12. The methods used in this evaluation were:
 - i. Documentation review. A comprehensive review of the documents generated by the project was carried out. This included semi-annual and annual progress reports; technical and legal documents related to the work of the project coordination team and consultants; the MTR; the annual operating plans; the minutes of the technical and executive committee; the GEF tracking tool; and the monitoring system developed by the project, as well as municipal, departmental, and national planning and strategic documents, and other external documents that were relevant to the evaluation.
 - ii. Semi-structured interviews. In order to incorporate the opinions, perspectives, data and observations of the project executors, beneficiaries, and other national and local actors, semi-structured individual and group interviews (face-to-face and virtual) were conducted. Interview protocols were prepared for each category of stakeholder. A total of 255 people (127 women and 128 men) were interviewed (see Appendix 1). The criteria for selecting the interviewees were based on ensuring that each sector participating in the project was represented. Thus, the list of interviewees included representatives of the national, departmental and municipal governments, as well as the autonomous territorial entities, economic associations, non-governmental organizations (NGOs) and academia. The information collection phase took place from 3 May to 30 June 2022.
 - iii. Survey. A survey was carried out among the beneficiaries of the project during the evaluation mission to collect information on the development of capacities and knowledge related to the benefits and importance of agrobiodiversity. A copy of the survey form can be found in Annex 1. The survey was voluntary and 47 people (18 percent) of the 255 interviewees responded (21 women and 23 men; 3 people did not respond).

1.5 Limitations

13. The limitations of the evaluation came from difficulties in interviewing government counterparts that had participated at the beginning of the project but, due to government changes, are no longer in office. In particular, it was not possible to interview personnel from the Water and Environment Implementing Entity (EMAGUA), which served as the executing entity of the project under the Operational Partners Implementation Modality (OPIM). This limited the availability of information and the opinions of public officers on the design and the first phase of project execution. Another limitation was the lack of availability of the minutes of the steering committee and technical committee meetings held during that first phase of execution, which limited the analysis of the functioning of these committees.

1.6 Structure of the report

14. After this introduction, Section 2 of the report presents the background and context of the project, including the TOC. Section 3 presents the main findings for each evaluation question. Conclusions and recommendations are included in Section 4 and good practices and lessons learned are in Section 5. In addition to the appendices, the report includes an annex with the survey form used in the evaluation.

2. Background and context of the project

Table 3. Basic project information

<p>Title: Conservation and sustainable use of agrobiodiversity to improve human nutrition in five macroregions (GCP/BOL/046/GEF)</p> <p>GEF project ID number: 4577</p> <p>Recipient country: The Plurinational State of Bolivia</p> <p>Focal area of GEF cycle 5: Biodiversity</p> <p>Funding partner: GEF</p> <p>Implementing agency: FAO</p> <p>Co-executing agency: FAO</p> <p>Co-executing partner: Ministry of Environment and Water</p> <p>Date of project start and expected end: 14 January 2016 to 30 June 2022</p> <p>Total project budget: USD 16 715 021, including committed co-financing of USD 13 865 021</p> <p>Date of mid-term evaluation: August 2020</p>
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Source: Elaborated by the Evaluation Team.

15. The Plurinational State of Bolivia is among the countries with the greatest biodiversity in the world. It has varied physiographic and environmental characteristics and diverse geographical landscapes within five macroecoregions: Altiplano, Valles, Trópico/Llanos, Chaco and Amazonia. According to the PRODOC, this biodiversity is combined with a great cultural diversity of Indigenous Peoples who practice different forms of agricultural domestication. Due to these botanical, cultural and geographical factors, the country is considered one of the seven main centres of origin of domesticated plants in the world. About 14 000 species of native plants and their seeds have been recorded (not including ferns, mosses and algae). In particular, quinoa, cañahua (*Chenopodium pallidicaule*), amaranth, yam (*Oxalis tuberosa*) and potatoes are traditional foods of the Andes region. These foods are known for their high nutritional value, versatility of use, climate resilience and ability to adapt to environmental stress – including climate variability. In addition, these foods are associated with the food culture and ancestral traditions of the regions.
16. However, in recent years, these traditional foods have been replaced by the consumption of imported cereals (maize, wheat and rice). This is due to the low commercial competitiveness of traditional foods, which has generated the loss of their genetic diversity. This situation has occurred at the national level and affects the five previously mentioned macroecoregions. Specifically, the PRODOC identified three problem areas that this project aims to address: a) food and nutrition insecurity; b) genetic and agrobiodiversity erosion; and c) climate change.
17. Regarding food and nutrition insecurity, it was reported that more than a quarter of the Bolivian population lives in extreme poverty and more than half of the municipalities present very high degrees of vulnerability to food insecurity – the indigenous population being the most affected. In addition, like other Latin American countries, the Plurinational State of Bolivia is going through a nutritional transition, characterized by problems of malnutrition and micronutrient deficiencies in low-income groups, and diseases in middle- and high-income groups due to excessive consumption of foods that are highly energy-rich but have little nutritional value. Data collected through food safety surveys shows that there are deficiencies in the quality of the diet.

18. In this regard, it was pointed out in the PRODOC that the loss of agrobiodiversity could also directly affect the food security and nutritional status of communities by reducing the food options that could play an important role in their diet. In addition, the contribution of agrobiodiversity to food and nutrition security, and to the reduction of malnutrition, has been underestimated. It was also found that there is limited information and a lack of awareness among institutions, producers and consumers about the nutritional content of local agrobiodiversity foods. In the five Bolivian macroregions, diets are based on a small number of foods and little attention has been paid to traditional knowledge and the dissemination and sustainability of local practices.
19. Regarding genetic erosion and agrobiodiversity, the PRODOC showed that the area cultivated with native plants has been reduced and that native species have been displaced by introduced crops. Currently, native crops cover an area of 909 385 ha, which represents 23.4 percent of the cultivated area nationwide (INE, 2022). In terms of genetic erosion of the wild relatives of cultivated plants, there is a threat of extinction of the wild relatives of potatoes and peanuts, mainly due to habitat loss and land use change. In addition, in the main agricultural areas of the country, agricultural production based on few crops or monoculture is being established. This reduces the variety of cultivated plants by focusing mainly on export products. In this regard, the limitations of institutions, policies and programmes in highlighting the importance of agrobiodiversity in key areas such as health, agriculture, education and food security are noted, along with the lack of incentives to promote the production and marketing of agrobiodiversity products.
20. Droughts, floods, extreme temperatures and catastrophic landslides have increased in frequency over recent years, affecting the agricultural and livestock sectors. Forecasts warn that changes in the frequency and intensity of droughts and floods will affect stability of and access to essential foods. Changes in the climate are also leading to the emergence of new pests and diseases that affect agricultural production.

2.1 Project objectives and scope

21. To address these problems, and under the premise that agricultural biodiversity plays a key role in mitigating the consequences of climate change and providing food that contributes to the diversification of diets, especially for vulnerable populations, the project proposed the following overall environmental objective: to conserve *in situ* agrobiodiversity in five macrocoregions and to improve the livelihoods of the local population. In order to achieve this objective, the project proposed the valuation, conservation and sustainable use of agrobiodiversity in policies, regulatory frameworks and national programmes (health, education, rural development and food security), the provision of market incentives, and a process of awareness raising and training in the use of agrobiodiversity and the sustainable management of natural resources.
22. The proposed development objective was to manage and harness agrobiodiversity in a sustainable manner and strengthen food security through improved access of indigenous populations and local communities to nutritious and diversified diets. The focus was on *in situ* conservation and the sustainable intensification of plant/crop ecotype production based on nutritional value and adaptability to climate change. This involved creating market links with the support of awareness raising campaigns and product labelling.

23. The project strategy to meet its environmental and development objectives is structured into four technical components:
- i. Component 1. This focuses on increasing agrobiodiversity knowledge in the five macroregions and systematizing it in the National Information System on Native Agrobiodiversity, Nutritional Value and Adaptability to Climate Change (SNIAGBD). In this regard, the different crop varieties and their wild relatives would be evaluated, and selected species would be analysed according to their current use (with a gender approach), nutritional information and resilience to climate change. This would allow the selection of ecotypes for *in situ* conservation.
 - ii. Component 2. Based on the selected ecotypes, this component focuses on developing management plans for their *in situ* conservation, considering the recovery and promotion of traditional practices and the characterization of the ecotypes. To achieve this objective, information would be obtained on traditional practices and the technologies used, and an inventory and collection of ecotypes and their wild relatives would be carried out. Then, the species would be planted in demonstration plots in the selected communities of each macroregion. The replication of the practices in other community plots would be expected to expand the project benefits. The agricultural products generated would have an agrobiodiversity label with their nutritional content in order to strengthen ties with the market and promote nutritious and climate-resilient products.
 - iii. Component 3. This component focuses on promoting the incorporation of agrobiodiversity conservation in relevant policies and regulatory frameworks, especially in relation to nutrition, food security and resilience to climate change. To this end, an interinstitutional platform would be created to inform and sensitize key stakeholders, and to strengthen or develop institutional technical capacities to facilitate interinstitutional cooperation.
 - iv. Component 4. This component is transversal to the other three components and focuses on providing communications to raise awareness and develop capacities for each component according to their requirements. In this regard, a national communications strategy would be developed. It would include the preparation and distribution of promotional material and a targeted training programme. Further, it would be based on the needs of the different groups and have a gender approach.
24. The project would be executed through the OPIM modality with the Ministry of Environment and Water executing the project and receiving the resources. FAO would be the implementing agency and project supervisor. However, in 2018, the implementation modality changed and FAO took over the direct execution of the project. The project resources correspond to a GEF grant of USD 2.6 million and co-financing of USD 13 865 021, meaning the total resources would be USD 16 715 021.

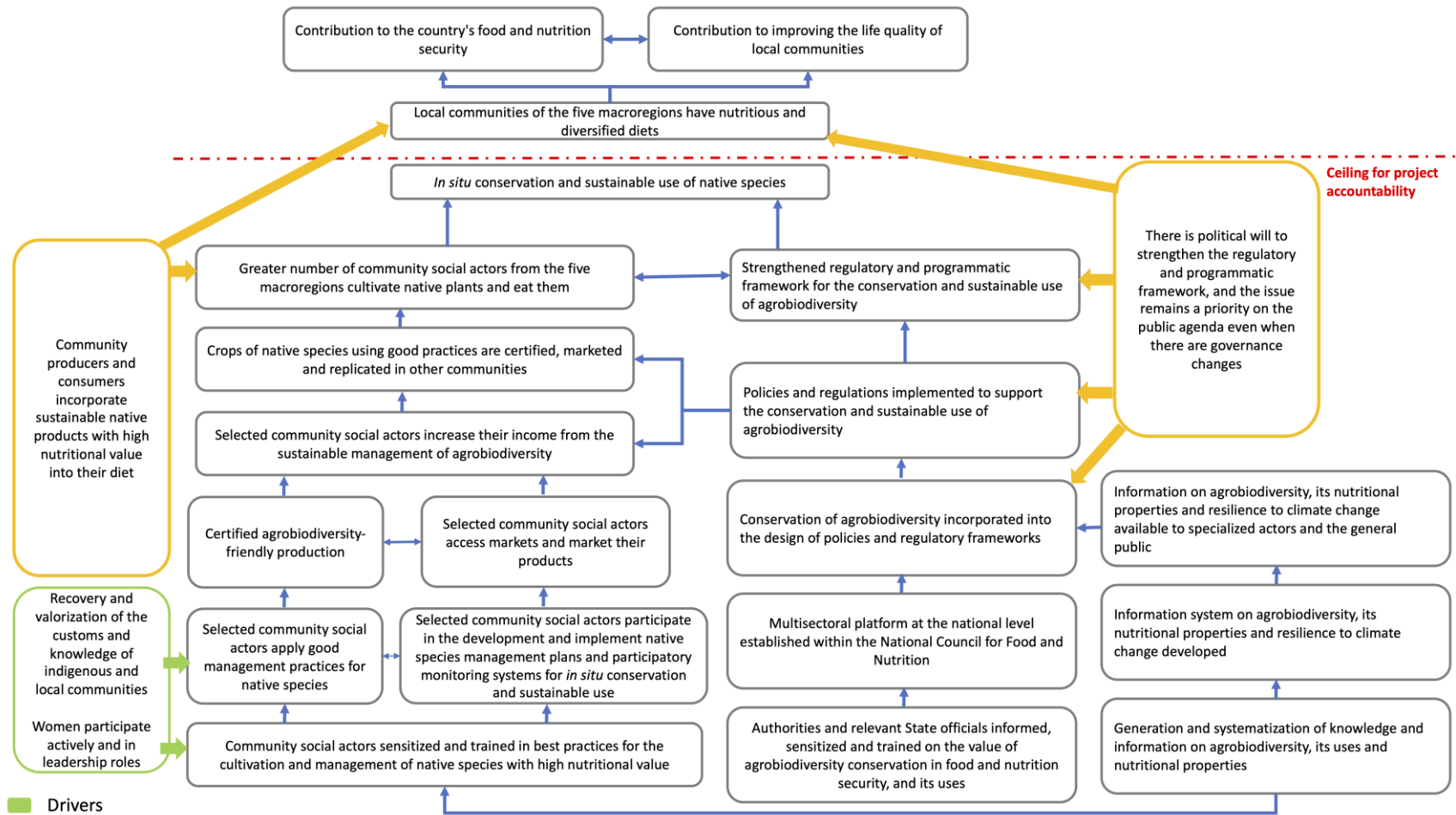
2.2 Theory of change

25. The project's TOC, which was reconstructed during the MTR, will be used in this terminal evaluation. Some adjustments and additions were made by the Evaluation Team to facilitate its use. The TOC narrative is presented below and the map is shown in Figure 1. It is important to mention that the red line on the map indicates to what extent the project is responsible for the conditions of the TOC that must be met to achieve its objectives. In other words, the red line indicates the limit of the project's accountability.

26. The TOC is based on three strategies of change:
 - i. community awareness raising and capacity building, and implementation of good practices by producers for the cultivation, *in situ* management and marketing of native species with high nutritional value (for example, through the design and implementation of management plans);
 - ii. strengthening of the regulatory and programmatic framework of key institutions on *in situ* conservation and use of agrobiodiversity; and
 - iii. generation and systematization of information on native species and their nutritional and cultural value.
27. The expected short-term changes that these strategies would generate during the project execution would be: a) promoting the cultivation and consumption of native plants by community social actors in the five macroregions as a result of the project actions and their replication in other areas; b) strengthening the regulatory and programmatic framework for the conservation and sustainable use of agrobiodiversity; and c) sharing information on agrobiodiversity, its nutritional properties and resilience to climate change with specialized actors and the general public. Taken together, these actions would contribute to *in situ* conservation and sustainable use of native species and increase the income of the participating social actors.
28. The main assumptions underlying these changes are that: i) community producers and consumers incorporate sustainable native products with high nutritional value into their diets; ii) there is political will to strengthen the regulatory and programmatic framework; and iii) the issue of agrobiodiversity remains a priority on the public agenda, even when there are governmental changes. The main drivers are the recovery and valuation of the customs and knowledge of indigenous and local communities, and the active participation of women.
29. To achieve these changes, the project would start by generating and systematizing the available information on the nutritional properties and resilience to climate change of the native species present in the five macroregions. The knowledge produced and systematized in a national information system would form the basis for actions to raise awareness and develop the capacities of authorities, public officers and community social actors related to the benefits of these crops, as well as the appropriate management practices for their production.
30. In addition to knowledge generation and the development of capacities, the relevant institutional stakeholders would create a multisectoral platform to incorporate the conservation and sustainable use of agrobiodiversity in agriculture, education, nutrition, health and food security programmes and policies.
31. For their part, the community social actors would begin to implement good practices for the production of native species, management plans, and participatory monitoring systems for *in situ* conservation and the use and commercialization of agrobiodiversity products. The commercialization of agrobiodiversity products would generate greater income for producers and these actions would be replicated in other communities, thus expanding the coverage and effects of the project.
32. Therefore, in the medium term, it is expected that the local communities of the five macroregions will have a nutritious and diversified diet, which includes the consumption

of native plants. In the long term, these results are expected to contribute to food security and an improved quality of life in the local communities.

Figure 1. Theory of change adapted for the project



Source: Based on the TOC reconstructed in the MTR.

3. Findings

3.1 Relevance

Finding 1. The project is aligned with the priorities and strategies of the Bolivian Government and some departmental and municipal governments on issues of food sovereignty and the protection and sustainable use of agrobiodiversity.

3.1.1 National level

33. The project is aligned with the Political Constitution of the State (Constituent Assembly, Honourable National Congress, 2009)⁴ regarding the sustainable use of biodiversity and with the Patriotic Agenda of the Bicentennial 2025 (Ministry of Development Planning, 2013), specifically the pillars on productive food and environmental sovereignty. In addition, it is part of the strategic guidelines proposed in the Economic and Social Development Plan 2021–2025 (Ministry of Development Planning, 2021), especially Axis 3 on food security with food sovereignty, the promotion of exports with added value and tourism development, as well as Axis 8 on promoting a sustainable and balanced environment while protecting Mother Earth. The project will also be implemented within the legal framework related to natural resources, family farming, and food security and sovereignty (Plurinational Legislative Assembly, 2006; 2010; 2012; 2013).
34. The sectoral plans of the Ministry of Environment and Water and the Ministry of Rural Development and Land form the specific programming framework for the project. In this regard, the project is aligned with both plans regarding the recovery of ancestral knowledge and the valuation of agrobiodiversity, the use and conservation of genetic resources of agrobiodiversity, and the generation of safe food products with high nutritional value to contribute to the food security of beneficiary families.
35. Thus, the 2016–2020 Integral Development Plan of the Ministry of Environment and Water (Ministry of Environment and Water, 2017), which is still in development, proposes the integral management of biodiversity and defines the forest as a means of life and a source of food. To this end, the plan establishes strategic guidelines for the integral management of forests, biodiversity and protected areas, which consider, among other aspects, the promotion of diversified enterprises and initiatives for the protection and sustainable use of biodiversity. It also includes guidelines that address climate change.
36. For its part, the 2016–2020 Integral Development of the Agricultural and Rural Sector for Living Well (Ministry of Rural Development and Land, 2016) emphasizes policies on the use of native forest crops and fruits for food sovereignty and their connection to family and organic farming. Among other objectives, these policies are aimed at the development of innovation and the recovery of ancestral practices and knowledge for agricultural, fishing and forestry production, and the use and management of soil, water and plant cover for agricultural and forestry production. Under this framework, the following national programmes related to agrobiodiversity have been implemented since 2019 to support:

⁴ Article 342: "It is the duty of the State and the population to conserve, protect and make sustainable use of natural resources and biodiversity, as well as to maintain the balance of the environment." Article 354: "The State will develop and promote research related to the management, conservation and use of natural resources and biodiversity."

a) fruit production (apple, peach, avocado and cherimoya);⁵ b) the production and harvesting of Amazonian fruits (Brazil nut, açaí, cupuaçu and majo);⁶ and c) the production and harvesting of cocoa.⁷ In addition, programmes were launched in 2021 to support the production of Andean grains (quinoa, cañahua, tarwi and amaranth)⁸ and tubers and roots (native and commercial species of potatoes and cassava).⁹

37. This national framework remained in force during the implementation of the project and there were no changes that affected the relevance of its objectives or required the implementation of adaptive measures.

3.1.2 Departmental level

38. At the departmental level, the evaluation coincided with the process of designing the integral territorial development plans¹⁰ of the departments visited during the mission (Pando, Oruro and Chuquisaca). In this regard, and according to the interviews carried out with officers from these departments, the political will exists to include agrobiodiversity as a strategy to boost development and nutrition in these territories. In particular, the government of Pando informed the Evaluation Team that it will strengthen its Interinstitutional Platform for Amazon Fruits, which was established in 2018 as a mechanism for multisectoral coordination. The changes will make it possible to more effectively organize the interventions of national and international organizations and NGOs for the sustainable use of açaí, majo, Brazil nut and other species of the Amazon forest while improving their manufacturing and commercialization processes.

39. Direct actions were also identified in the departments of Oruro and Chuquisaca to improve nutrition through school breakfasts, which contain agrobiodiversity products. Therefore, in practice, the project was directly aligned with the actions carried out by the government of Pando. It also aligned with the territorial plan for integral development to live well from the previous administration (Ministry of Development Planning, 2016)¹¹ and by the governments of the departments of Oruro and Chuquisaca.

3.1.3 Municipal level

40. All municipal authorities interviewed (7 mayors, 17 councillors and 15 technicians from the 11 municipalities visited) valued the use of local products and recognized agrobiodiversity as an economic driver of their territories. As evidence of this, between 2019 and 2021, six municipalities (Cobija, San Antonio, San Carlos, San Ignacio, Concepción and El Torno) enacted their Municipal Council for Food and Nutrition (COMAN) laws; three municipalities

⁵ Budget of BOB 169 309 917.

⁶ Budget of BOB 90 390 875.

⁷ Budget of BOB 152 980 283.

⁸ Budget of BOB 229 631 129.

⁹ Budget of BOB 767 858 926.

¹⁰ Law No. 777 of the integral planning system of the State (Plurinational Legislative Assembly, 2016) establishes the territorial plan for comprehensive development to live well as an instrument for planning integral development and territorial organization of autonomous departmental, regional and municipal governments for a period of five years.

¹¹ It is important to highlight that, since before the start of the project, the government of Pando, through its 2011–2015 territorial development plan of the Pando department (Autonomous Departmental Government of Pando, 2011), has provided support for the production of forest products (açaí, majo, sinini, jatata [*Geonoma deversa*] and jipijapa [*Carludovica palmata*]), cultivated species (cocoa and passion fruit), and matters related to associations and institutional platforms.

(Cotagaita, Riberalta and San Ignacio) declared, by law, their agrobiodiversity products as part of their natural heritage or as strategic items; and five municipalities (San Ignacio, San Antonio, San Carlos, Filadelfia and Monteagudo) presented laws on healthy consumption and food promotion. This reflects the project's alignment with the policies of these municipalities. At the time of the evaluation's data collection, all municipal governments interviewed were in the process of preparing their territorial plans for integral development to live well. They expressed the political will to incorporate agrobiodiversity into their plans. They also recognized its importance and considered the results of the project. For example, according to the interviews, the municipality of Toledo highlighted the knowledge generated by the project on the genetic variability of cañahua and its other qualities. The municipality aimed to include a cañahua programme within its territorial integral development plan for living well.

Finding 2. The project met the needs of the local beneficiaries, including those of the participating indigenous communities, in the five macroregions that had interventions. However, some needs remained unmet due to economic, administrative and health factors.

41. The project worked with 28 producer associations. The evaluation mission was able to interview representatives at 14 of these associations (50 percent) who stated that they could present their demands and needs in the project's early stages. The project responded to their demands and needs through trainings on the production, collection, processing and marketing of agrobiodiversity products. They also received basic equipment for the production of agrobiodiversity products and support in developing a management plan for the forest where the fruits are harvested. This also involved creating a production plan for agrobiodiversity crops. In addition, they received support to obtain the participatory guarantee system (PGS) certification for their crops, which allows them to label their products as organic and facilitates their commercialization. These contributions are described in greater detail in the section on effectiveness.
42. The beneficiaries of producer associations also commented that, in some cases, their demands had not been fully met. This depended on budgetary restrictions (for example, there was no budget to invest in expensive equipment) and the project's administrative processes (for example, restrictions on the importation of equipment or the purchase of seeds), as well as a lack of time due to the change in the execution modality and the interruption of work as a result of the COVID-19 pandemic. Also, beneficiaries of producer associations stated that another benefit was the support they had received in generating processed food products and obtaining the Sanitary Registry of the National Service of Agricultural Health and Food Safety (SENASAG), which includes the formulation and standardization of product ingredients and the design of product labels. This support made it possible to generate better quality products and provide information on their nutritional value. These are benefits that are part of the project's expected outputs and outcomes.

Finding 3. The project is aligned with FAO's strategies and priorities at the country, regional and global levels. These focus on food diversification, promotion, and access to healthy eating and improved nutrition.

43. During the design stage, the project was aligned with the 2013–2017 Country Programming Framework of FAO Bolivia (FAO, 2022c), specifically Priority 1 on *Food security and food sovereignty*. This aimed at providing advice for the development of a national policy that would incorporate food and nutrition security with food sovereignty. Under this priority, the diversification of food production systems is promoted through two

strategies: the recovery and promotion of native crops with a high content of micronutrients for the self-consumption of families and the sale of surpluses. As part of the expected outputs of this programming framework, the Ministry of Rural Development and Land and the Ministry of Environment and Water have developed an integrated strategy for nutritious crops (cañahua and amaranth, among others), agrobiodiversity and forest products of low production and consumption. They have also developed a strategy for the recovery and production of fish species within the framework of the PRONABIO programmes and the Decentralized Public Institution for Food Security (IPDSA). Under this programming framework, the “Forest and farm facility phase II: Climate-resilient landscapes and better livelihoods” project is being developed with potential synergies that have helped to increase the project’s achievements (see the section on sustainability for more details).

44. In addition, the project was aligned with the regional priority, *Transforming food systems to promote healthy eating for all*. This priority was established at the 36th FAO Regional Conference for Latin America and the Caribbean in October 2020 (FAO, 2022d). It is currently aligned with the regional priority, *Sustainable agrifood systems*, established at the 37th FAO Regional Conference in early April 2022. This priority focuses on providing information to consumers and improving consumption habits. It promotes healthy eating in order to address poor diets, issues related to being overweight and obesity. The project’s approach is based on two programmatic axes: the first consists of guaranteeing a greater supply of food and physical access to nutritious diets, and the second focuses on facilitating economic access to food and improving information and consumption habits (FAO, 2022a).
45. At the global level, the design stage of the project was framed within FAO’s Strategic Objective 1,¹² which contributes to the eradication of hunger, food insecurity and malnutrition. Currently, the new FAO Strategic Framework 2022–2031 (FAO, 2022b) seeks to support the fulfilment of the 2030 Agenda through the transformation towards more sustainable, resilient, inclusive and efficient agrifood systems, including better nutrition. Healthy eating for all and better nutrition for the most vulnerable are among the priority areas.

Finding 4. The project continues to be aligned with Objective 2 of the GEF-5 biodiversity focal area, which promotes the integration of conservation with the sustainable use of biodiversity.

46. The project is aligned with Objective 2 of the GEF-5 biodiversity focal area, which is to mainstream biodiversity conservation and sustainable use in production landscapes, seascapes and productive sectors. To this end, the strategy was to strengthen the capacity of the public sector to manage and regulate the use of biodiversity in the productive sectors. It also aimed to take advantage of the opportunities for resource managers and users, including the private sector, to support the production of goods and services that respect biodiversity.
47. The rating for the relevance criteria is highly satisfactory.

3.2 Effectiveness

Finding 5. The project contributed significantly to *in situ* conservation and the sustainable use of agrobiodiversity through: its impact on public policies, mainly local laws in the health sector; the

¹² This objective is part of the revised FAO Strategic Framework 2010–2019.

generation of knowledge and the systematization of existing information; the promotion of good practices for the management and use of agrobiodiversity; raising awareness; and the development of capacities in government and social actors.

Finding 6. The implementation of *in situ* conservation actions, as well as the determination of the nutritional value of the ecotypes and their possible use as food, facilitated opportunities to strengthen food security in peasant and indigenous communities. At the same time, this generated greater interest from institutions related to research and the development of knowledge.

48. Appendix 5 presents the results matrix, which details the level of achievement of each project output and outcome. The most relevant achievements are described below.

3.2.1 Component 1: National Information System on Native Agrobiodiversity, Nutritional Value and Adaptability to Climate Change

Finding 7. The project increased information on agrobiodiversity species through the generation of new knowledge and the systematization of existing information. Part of this information was established as the technical foundation that helped to meet the objective of the project, which is *in situ* conservation of agrobiodiversity.

Finding 8. The agrobiodiversity information system still needs to be made available to the public. In addition, some areas for improvement were found in the determination of the nutritional value of the species.

49. This achievement was possible due to the alliances generated with institutions, regulatory bodies and local governments. Documents on agrobiodiversity that had been developed by research bodies before the start of the project were also made available. The political interest of the national, departmental and municipal governments on issues related to agrobiodiversity and healthy eating was crucial. The main challenge was the lack of information on the capacity of the National Institute of Health Laboratories (INLASA) to provide services for determining the nutritional composition of foods based on international guidelines during project development. This prevented the standardization of measurements with FAO/International Network of Food Data Systems (INFOODS).

50. For Outcome 1.1, the progress towards the goal reached 80 percent and the project collected 1 239 documents on agrobiodiversity. However, at the time of the evaluation, the inclusion of the documents in the SNIAgBD was still in progress. Therefore, the goal has not been fully met for this outcome. Once the documents are uploaded and the system begins to function, the availability of information on agrobiodiversity will have increased.

51. At the output level, the SNIAgBD was developed through Output 1.1.1 based on the guidelines of the Ministry of Environment and Water. Since its design, it has been hosted on the servers of the Ministry of Environment and Water. It is expected that the ministry will operate it upon completion of the testing stage. Regarding the documents collected on agrobiodiversity, only 54 percent were added to the SNIAgBD at the time of the evaluation. Also, the products generated by the project have been uploaded to the system. As a result, progress towards the goal has reached 80 percent. It is important to note the similarities between the goals of this output and Outcome 1.1.

52. In terms of Output 1.1.2, the project reached 62 percent of its goal. Physical-chemical composition and nutritional value tables were created for 56 ecotypes of agrobiodiversity; the *ex-post* report on food consumption is in the process of being prepared. Based on this, it will be determined if there was an increase in the consumption of food from

agrobiodiversity, which is the main result expected. As for Output 1.1.3, the project reached 112 percent of its goal, working with 56 agrobiodiversity ecotypes (at least 10 ecotypes per macroregion), including 25 plants/crops and 31 wild species. These ecotypes were categorized and new products were generated as part of the productive enterprises supported by the project – the sale of which generated additional income for some associations. In terms of the database on the nutritional content of the agrobiodiversity of Output 1.1.4, the project reached 80 percent of its goal. Although the physical-chemical composition and nutritional value tables of 56 ecotypes were generated, they have not been made available to the public. The composition data of nutritional values is in the process of standardization and in line with the guidelines of FAO/INFOODS.

Figure 2. A sample of agrobiodiversity in the Chaco macroregion



Source: FAO. 2022. Photo taken by the Evaluation Team. Chaco, Bolivia.

3.2.2 Component 2: Ensure support for *in situ* conservation of agrobiodiversity by linking selected ecotypes to markets

Finding 9. The project generated and strengthened *in situ* conservation processes of the selected agrobiodiversity species through the development of management and production plans. Production transformation was also promoted to increase the value of agrobiodiversity products and facilitate their commercialization. These efforts helped to ensure support for conservation. In some macroregions, such as the Amazon, the advances were very significant. However, in other macroregions, such as the Trópico macroregion, progress was more limited.

53. The main factors in the successful achievement of the goals of Component 2 were the existence of: a) a regulatory framework on biodiversity, healthy eating and respect for Mother Earth; b) methodologies and a bibliography for the management and conservation of agrobiodiversity; c) the positive assessment of agrobiodiversity by the beneficiaries and government authorities; and d) the willingness of other institutions and funding sources to coordinate joint actions.
54. Regarding the challenges facing the project, the COVID-19 pandemic restricted fieldwork temporarily and led to modifications in the communications strategy. Other challenges include the ambitious geographic coverage and limited budgetary and human resources of the project, the change in the execution modality, and changes in authorities at the national, departmental and municipal levels.

55. In particular, and as described below, the results of this component were greater in the Amazonia macroregion due to the greater number of agrobiodiversity species present in the area and its large geographical area. In addition, the previous work carried out by departmental and local governments, combined with the large number of national and international organizations that work in the area, allowed for coordination to achieve greater results. In other macroregions, such as Trópico, no previous work had been done on most of the agrobiodiversity species studied, and the availability of species is lower. In addition, changes in the project's regional coordinator and local authorities affected the continuity of the work and limited the achievement of results.
56. In terms of Outcome 2.1, the project achieved 1 214 percent of its goal. A total of 66 065 ha has benefitted from the project's sustainable use and conservation scheme, compared to the goal of 6 000 ha – of which approximately 90 percent represents areas with management plans for wild species,¹³ mainly in the Amazon. The remaining 10 percent corresponds to the cultivated ecotypes. Through the National Agrobiodiversity Programme, it is expected that a total of 199 418 ha will be incorporated under the integrated and sustainable management of agrobiodiversity.
57. In terms of Output 2.1.1, the project reached 162.5 percent of its goal. The distribution and description of ecotypes and traditional knowledge in each macroregion was documented. The book, *The diversity of native maize in Bolivia*, was published (Santos *et al.*, 2021). In addition, the project identified and characterized 225 varieties of ecotypes, which is more than double the goal of 100 ecotypes. This information was included in catalogues that describe the characteristics of their cultivation or use in the forests and the relevant local knowledge of the beneficiaries. The goal was to identify 100 ecotypes.

Figure 3. *Ex situ* conservation of agrobiodiversity



Source: FAO, 2022. Photo taken by the Evaluation Team. Bolivia.

¹³ During the review phase of the evaluation report, the project team informed the Evaluation Team that the total *in situ* conservation area was 6 093.16 ha, which is comprised of: 66 337 ha through 9 integrated management plans in 31 communities for the conservation and management of the agrobiodiversity of the Brazil nut, majo, açai, guapurú, sahuinto, cupesí, mistol, algarrobo, Bolivian walnut, Bolivian mountain coconut (*Parajubaea torallyi*), cherimoya crespa and chiquitana almond, and 756.16 ha through the planting of agrobiodiversity species in 97 communities (255 ha in the 2019 campaign and 501.16 ha in the 2020 campaign).

58. Regarding the implementation of *in situ* conservation practices¹⁴ and management and production plans through Output 2.1.2, the project has achieved 117.7 percent of the goal. The project worked with 26 communities and developed 9 management plans and 2 production plans.¹⁵ However, the plans for Charagua Norte, Sinai, San Crucito, Ibasiriri and Machareti received observations on their content and require strengthening. More details are available in the section on environmental sustainability and environmental and social safeguards.
59. Output 2.1.3 facilitated the systematization of the new good practices that were applied in crop management and the use of agrobiodiversity species.¹⁶ These documents are pending inclusion in the SNI AgBD. Progress towards the achievement of the goal was 80 percent.
60. Based on the experiences generated by the project, Output 2.1.4 promoted the formulation of the National Agrobiodiversity Programme, which will be implemented in 163 additional communities where management and cultivation plans will be promoted. The programme proposal was prepared with the Ministry of Environment and Water and was disseminated in the five macrocoregions. The Ministry of Rural Development and Land did not participate in the formulation of this programme, which means there is no commitment on their part to intervene in additional communities. The project achieved 90.2 percent of the output goal.
61. The project contributed to the creation of a virtual platform that will facilitate the strengthening of the mechanism and processes to monitor genetic and climatic trends, in addition to becoming a repository of maps and studies on agrobiodiversity. Currently, however, the platform is not operating as a system for monitoring genetic and climatic trends of the agrobiodiversity species. Considering these elements, Output 2.1.5 achieved 60 percent of its goal.
62. Regarding Outcome 2.2.a, there was no documentation available at the time of the evaluation to determine the increase in the income of the beneficiary families. During the interviews with the beneficiaries, the Evaluation Team learned that there were different

¹⁴ These include practices for seed conservation; the proper use of biofertilizers; good manufacturing, transformation and safety practices; and good harvesting and gathering practices for different species, such as the açai, among others.

¹⁵ The project team informed the Evaluation Team in the review phase of the evaluation report that the total figure includes work with 31 communities that manage their agrobiodiversity resources through 11 integrated management and production plans for agrobiodiversity species with a participation of 1 961 people (49 percent women). It was also reported that there were integrated management and production plans in the communities of: a) Sinai (Brazil nut) with 124 beneficiaries (50 percent women); b) Santa Crucito (Brazil nut) with 56 beneficiaries (29 percent women); c) El Chorro (Brazil nut) with 72 beneficiaries (33 percent women); d) the Comprehensive Management Natural Area El Palmar (Bolivian mountain coconut), which includes a potential beneficiary population of 440 families (1 096 people, 50 percent women); e) Charagua Norte (guapurú and sahuinto) with 44 beneficiaries (57 percent women); f) Ibasiriri (cupesí and mistol) with 16 beneficiaries (100 percent women); g) Machareti (algarrobo and mistol) with 101 beneficiaries (64 percent women); h) Ingre (algarrobo, Bolivian walnut and mistol) with 113 beneficiaries (42 percent women); i) Santa María (majo and açai) with 268 beneficiaries (50 percent women); j) 15 de Agosto (Chiquitana almond) with 37 beneficiaries (55 percent women); and k) Lomerío (cherimoya crespá) with 14 beneficiaries (71 percent women).

¹⁶ The project produced 33 documents on good practices (Altiplano, 3; Amazonía, 13; Chaco, 8; Trópico, 5; and Valles, 4). In addition, there are 7 transformation process manuals (chocolate bars, cookies, jams and yoghurt) and a document on good manufacturing and post-harvest practices, resulting in a total of 41 documents that systematize good practices related to the ecotypes of agrobiodiversity. These were used in the training and support processes for the beneficiaries.

experiences regarding commercialization and income generation. Some associations reported an increase in their income, while others informed the team that the increase had been temporary or only a token amount.¹⁷

63. Outcome 2.2.b achieved 4 231 percent of its goal. A total of 4 858.37 ha were certified under organic production standards through the PGS mechanism.¹⁸ This area has been mapped with georeferencing data and monitored through the GEF monitoring tool.¹⁹ In addition, the proposal of the National Agrobiodiversity Programme aims to establish 199 418 ha under integral and sustainable management of agrobiodiversity. It is important to highlight that the proposal of the National Agrobiodiversity Programme is a strategic co-benefit of the project since its preparation was not included in the PRODOC.
64. Output 2.2.1 achieved 104.8 percent of its goal. It intervened in 62 communities and benefitted 453 families (37.96 percent had women as heads of the household), and promoted the establishment of PGS certification mechanisms.
65. Output 2.2.2 recorded 11 agrobiodiversity food products with labels containing their nutritional content. However, there is no evidence available on the expected increase in sales of labelled products. The project provided technical assistance to 27 associations and communities for the commercialization of products with added value and the development of business plans. Total sales of agrobiodiversity products reached more than BOB 1.8 million. However, there is no information that shows the increase corresponding to each beneficiary under the annual management plan. The progress towards the goal of this output was 110 percent.

3.2.3 Component 3: Mainstreaming the conservation of agrobiodiversity in policies and regulatory frameworks, especially in relation to food security and nutrition

Finding 10. The project achieved the mainstreaming of agrobiodiversity, mainly at the municipal level, through the generation of local laws.

66. In relation to this finding, the success factors of Component 3 were the openness and willingness of local governments to promote agrobiodiversity and healthy eating; the regulatory frameworks that empowered local governments to generate municipal laws and carry out territorial planning; the recognition of agrobiodiversity as an economic engine

¹⁷ In the final phase of the evaluation, the project team reported to the Evaluation Team that the estimated average income was USD 316 per year per family for 2 660 families in the different links of the production chain. This means that the target of the results framework of USD 216 per year per family was exceeded. However, the Evaluation Team identified methodological differences in the sampling method, geographic area and sample size between the initial and final surveys carried out.

¹⁸ It is important to mention that the project followed a different procedure to estimate the progress towards this goal by subtracting the area that had been reported under management plans from the total area covered by PGS. The project team also subtracted the area of crops that do not correspond to agrobiodiversity species from the total area covered by PGS. However, the Evaluation Team considers that the management plans and the PGS certification are two instruments with different objectives that complement each other. Therefore, it is important to inform the area covered by each instrument. Similarly, it is complicated to subtract conventional crops from PGS-certified production systems, given that the crops are rotated.

¹⁹ In the evaluation report review phase, the project team also informed the Evaluation Team that the total certified area was 967.17 ha. It also reported that 939.62 ha of certified land used for family farming does not have any of the prioritized agrobiodiversity species. Finally, the team indicated that the certified area in the El Palmar protected area is included in the area considered by the management plans to avoid double counting.

for the development of communities; and the progress that had been achieved since before the start of the project by other institutions and projects. The main challenge was the constant turnover of authorities at the municipal and departmental levels due to the end of public administration periods.

67. The goal of Outcome 3.1, which involved the inclusion of agrobiodiversity in regulatory frameworks, was achieved mainly through the creation and enactment of 16 laws, which are described below. According to the indicator for this outcome, a progress level of 70 percent was estimated. That is, the project was successful in contributing to the promulgation of municipal laws within the framework of public policies and other strategies of national interest. These promote the use of agrobiodiversity products to improve nutrition. However, only 7 points out of 10 were obtained by the project according to the GEF tracking tool. Although the project contributed to the creation of laws and the implementation of related actions, progress has not been made in the verification and monitoring of compliance with these laws, as indicated in the tracking tool and the PRODOC. Therefore, no changes generated by the new laws were identified during the evaluation mission. The co-benefit reported in the GEF monitoring tool is highlighted, particularly in the invasive species section. In fact, through the update of the management plan in the El Palmar ecological reserve, the project contributed to the control and management of exotic species such as pine and eucalyptus.
68. As for Output 3.1.1, which involved developing a multisectoral platform that would allow the incorporation of agrobiodiversity in agriculture, health and education policies, the project achieved 80 percent of its goal. A multisectoral platform, the Technical Committee of the National Council for Food and Nutrition (CT-CONAN), was created and achieved a significant impact on local policies through the creation of laws, as described in Output 3.1.2. This was achieved through the support of the COMANs. It is necessary to indicate that the COMANs are the operational arm of CONAN, since it is in the municipalities where activities related to complementary school meals and healthy eating are planned, budgeted and executed. At the national level, CT-CONAN promoted agrobiodiversity conservation through two national thematic roundtables: a) Food and nutrition in daily life; and b) Food production with food security and food sovereignty. However, this approach did not influence national policies.
69. Output 3.1.2 achieved 533 percent of its goal. The goal was to incorporate measures or actions related to agrobiodiversity in three new or existing policies. In practice, the project contributed to the creation of 16 laws at the municipal and departmental levels and to the issuance of a Ministerial Resolution for the Promotion of Maize as a Phytogenetic Resource. This regulatory framework, generated with the support of the project, helps to strengthen the conservation of agrobiodiversity and its use to promote healthy eating. The laws and their focus areas are included in the results matrix (Appendix 5).
70. Output 3.1.3 achieved 100 percent of its goal. That is, the project supported the EMPODERAR-IPDSA programme of the Ministry of Rural Development and Land with specific actions, as well as the investment proposal for a freeze-drying plant in the Pando Free-trade Zone. In addition, it supported and participated in the platform developed by the Technical Committee for Standardization 3-6, Fruits and Vegetables of the Bolivian Institute for Standardization and Quality, which developed norms for refrigerated and frozen majo and moriche palm pulp. The project promoted actions of six projects that include agrobiodiversity with strategic partners such as the Swiss Agency for Development

and Cooperation (SDC), together with the Universidad Mayor de San Andrés. The FAO “Forest and farm facility phase II: Climate-resilient landscapes and better livelihoods” project has supported the Integral Association of Abuna Fruit Harvesters, Producers and Processors (ASICOPTA), the Agricultural Association of Amazonian Producers of Majo and Açai in Buen Retiro (AAGROPAMA), and the Autonomous Municipal Government of Monteagudo.²⁰

3.2.4 Component 4: Communications and capacity building

Finding 11. The project implemented communications strategies using different digital and traditional media, thereby achieving national coverage. The use of local television and radio stations, as well as participation in thematic fairs related to agrobiodiversity, allowed the project to reach distant populations and, in some cases, with targeted content.

Finding 12. The effectiveness of the communications strategy, as measured through the level of awareness reached on the importance of agrobiodiversity, was not determined.

71. This section focuses on the achievement of the communications goals included in the PRODOC. The description of the communications strategy and its scope is in the section on communications, knowledge management and knowledge products. Regarding Outcome 4.1, which focused on generating greater awareness about the conservation, sustainable use and nutritional benefits of agrobiodiversity, awareness raising processes and training courses were carried out with the participation of stakeholders related to agrobiodiversity. The Knowledge, Attitude and Practice (KAP) survey of agrobiodiversity in the Plurinational State of Bolivia was carried out in 2020 in order to generate the baseline data on the level of awareness of the target population. During the information gathering phase of the evaluation, the results of the 2022 KAP survey were not available. However, in the evaluation report review phase, the project team informed the Evaluation Team that the results obtained from the second KAP survey showed an increase in the recognition of the term agrobiodiversity and, as in the first KAP survey, all those surveyed recognized the importance of agrobiodiversity for food security and the economy.
72. According to the interviews, it was possible to verify that the majority of the collectors and producers of forest fruit are aware of the importance of caring for the forest and protecting the soil and the resources they use for agrobiodiversity crops. One person interviewed said: “they have taught us to value native plants.” However, the interviewees did not remember

²⁰ The consolidated information on this output, provided by the project team to the Evaluation Team during the review phase of the evaluation report, is the following: five national programmes have implemented regulatory proposals and public investment projects linked to the management of species of agrobiodiversity. These are as follows: 1) the Bolivian Institute for Standardization and Quality will implement a national technical standard for the management of forest fruits; 2) EMPODERAR/IPDSA has developed six partnership proposals for the financing of family cocoa production; 3) Pando Free-trade Zone (Pando Decentralized Autonomous Government) is developing a mega açai freeze-drying plant; 4) Forest Mechanism/FAO/Ministry of Rural Development and Land will finance two community enterprise projects (ASICOPTA and AAGROPAMA) for the sustainable use of forest fruits; and 5) the National Coffee and Cocoa Programme will implement training courses for families of cocoa and coffee producers on conservation issues and agroforestry systems. In addition, the project had an impact on five local projects for public investment. These are: i) the Tarwi revaluation project implemented by SDC/Universidad Mayor de San Andrés; ii) the Pre-investment Technical Design Studies analysis, under the Ministry of Productive Development and Plural Economy, for the implementation of community economic organizations; iii) the ECOTIENDA project of the Amandiya agrobiodiversity for the commercialization of processed ecological products; iv) the Healthy Kiosks project for the promotion of nutritious fresh food in schools; and v) the investment project for the improvement of the Amandiya Community Economic Organization infrastructure implemented by the Andean-Amazonian Pluricultural Community for Sustainability/University of Bern.

- having heard or seen any radio or television programme on agrobiodiversity. Therefore, it was the training they had received that generated this change in behaviour rather than communications strategies. For their part, the municipal authorities interviewed also recognized the importance of agrobiodiversity for the development of their municipalities.
73. Output 4.1.1 achieved 229.1 percent of its goal. The project generated promotional material (for example, radio and television programmes, posts on Facebook and Twitter; see Appendix 5) about the conservation of agrobiodiversity, traditional knowledge, innovations and case studies to generate greater awareness of the importance of agrobiodiversity. Most of these documents require standardization of their content structures, submission to an editing process and their subsequent dissemination.
74. Output 4.1.2 achieved 191 percent of its goal. The project reached more than 2 million people through radio programmes and the promotion of healthy eating on television and social networks (Facebook and Twitter). Also, exchanges of experiences were carried out, as well as roundtables and forums on food security and better nutrition through the consumption of foods from agrobiodiversity. Activities were held in schools for tasting agrobiodiversity food products.
75. Through Output 4.1.3, 740 public officers (347 women and 393 men) and 3 151 producers (1 520 women and 1 631 men) received training. In the interviews with some public officers, it was identified that they had already applied the capacities acquired through their work on the COMAN laws. In addition, during interviews with the representatives of the beneficiary associations, the beneficiaries presented the products they had learned to make in their training sessions. However, this qualitative information was sufficient to quantitatively estimate the level of use of the acquired capacities, so it was not possible to estimate the level of compliance with this component of the indicator. As part of the results of Output 4.1.3, the project also promoted the formation of two networks of agrobiodiversity facilitators: the Altiplano network, with 7 facilitators, and the Amazonia network with 22 facilitators. The networks were made up of students from technical schools linked to agriculture. In the Altiplano, students from the Technological Institute, who were training as agricultural technicians, were interviewed. The students informed the Evaluation Team that they had received training from the project on the collection of seeds of local agrobiodiversity species and their positive selection, among other topics, and that the knowledge acquired was transferred to the producers of agrobiodiversity species. Thus, the aim of the networks was to increase the dissemination of the knowledge generated on agrobiodiversity species among local producers. However, it was reported that there was no strategy for the continuity of these networks once the project was completed. Progress towards the goal was 54 percent.
76. Output 4.1.4 of the project contributed to the generation of capacities for the elaboration of public policies on the use of agrobiodiversity in nutrition and food security, especially at the municipal and departmental levels. However, progress towards the goal was only 42 percent. In fact, as with the previous output, the project did not measure the implementation of the new capacities, both among public officers and nutritionists. This means that only one of the three goals of the output was achieved, which was the involvement of at least ten public or private institutions to support training on agrobiodiversity and human health. The project incorporated 14 institutions in the training processes.

3.2.5 Progress towards expected impact

Finding 13. Global environmental benefits were generated, such as *in situ* conservation of agrobiodiversity, its incorporation into regulatory frameworks, income generation, and an increase in the level of awareness about agrobiodiversity and its importance.

77. According to the project identification format, one of the expected environmental benefits was *in situ* conservation of selected local ecotypes that are important for nutrition and food security. As previously indicated, the project significantly exceeded the goal, achieving a total area of 66 065 ha under management and production plans. Therefore, this global environmental benefit was successfully achieved. This also contributed to the achievement of Objective 2 of the GEF-5 biodiversity focal area, which the project monitored through the GEF tracking tool.
78. Another global environmental benefit was the incorporation of measures for the conservation and sustainable use of agrobiodiversity in policies, programmes and regulatory frameworks on agriculture, nutrition, health and food security. The project contributed to the creation of 16 laws, of which 14 are municipal laws focusing on the formation of the COMANs, healthy food consumption and the declaration of agrobiodiversity species as strategic or part of the natural heritage. The other two are departmental laws. These include a law that declares the algarrobo as part of the natural heritage and another law on productive agricultural development that promotes agrobiodiversity. At the national level, the project contributed to the issuance of a Ministerial Resolution for the Promotion of Maize as a Phytogenetic Resource. This achievement also corresponds to one of the results of Objective 2 of the GEF-5 biodiversity focal area of the tracking tool. As previously mentioned, the implementation of some parts of these laws has already been achieved. However, as indicated by the GEF tracking tool, there was still no evidence of the verification and monitoring of compliance with these laws. This means that the requirement in the PRODOC was not fully met. Nevertheless, there was significant progress in fulfilling this benefit (7 points out of 10 expected in the GEF tool).
79. Income generation in the participating communities, derived from the production, processing and sale of agrobiodiversity products with high nutritional value and labelling, was established as another expected global environmental benefit of the project. In the information gathering phase of the evaluation, the results of the study to determine a possible increase in income were not yet available. During the evaluation report review phase, the project team informed the Evaluation Team that the completed study showed an average income generation of USD 316 per year per family, which exceeded the goal of USD 216 per year per family. Although the Evaluation Team acknowledges that the project generated an increase in income, it also recognizes the methodological differences found between the initial and final surveys carried out. This limits the determination of the level of increase in income. It is important to note that the increase in income is a useful indicator to show that progress is being made towards the expected impact of improving the quality of life of local communities. This is because income is also a key factor for economic access to food and to help cover the basic needs of families. However, in order to achieve the expected impact, it is necessary to strengthen this benefit. Indeed, according to the interviews, the resources obtained by some beneficiaries have not been constant, partly due to the seasonality of some fruit crops, or because they have only received a token amount.

80. The increase in stakeholders' awareness of the conservation of agrobiodiversity and its sustainable use, as well as its nutritional benefits, was another expected environmental benefit. The interviews showed that there was an increase in the level of awareness of some of those interviewed. However, the results of the second KAP survey were not available during the data collection phase of the evaluation. During the evaluation report review phase, the project team informed the Evaluation Team that there had been an increase in the level of awareness of agrobiodiversity based on the results of the second survey.
81. Another expected environmental benefit was having systematized information on agrobiodiversity food products, and the availability of nutritional information about these products, which is accessible to decision-makers, consumers and local communities. The project developed the SNIAGBD information system on agrobiodiversity, which was still in the testing phase at the time of this evaluation. Uploads of the documents compiled and developed by the project have not been completed.

Finding 14. The obtained results show that there has been a move in the right direction towards generating the expected impacts. In fact, the project has contributed to reactivating and, in some cases, strengthening the offer of traditional or native fruits and vegetables and processed food products with high nutritional value.

82. According to the 1996 World Food Summit (FAO, 2011), food security exists when all people have, at all times, physical, social and economic access to sufficient, safe and nutritious food that meets their daily energy intake needs and preferences to lead an active and healthy life. One of the essential dimensions that this definition raises, according to FAO, is the physical availability of food. In this regard, the project has contributed to reactivating and, in some cases, strengthening the offer of traditional or native fruits and vegetables and processed food products with high nutritional value. This, in turn, contributes to the fulfilment of Sustainable Development Goal 2 of the United Nations in terms of its contribution to food security and improved nutrition.
83. Although progress towards the expected impact is going in the right direction, it is still necessary to ensure that this supply of and access to native foods is stable, covers more territories and forms part of a diversified diet for both the families of producers and local consumers. The laws created and the ecological certification of food products constitute an important basis for conservation and sustainable use. This needs to be replicated in other geographical areas and strengthened to contribute to the country's food security.
84. In order to contribute to improving the quality of life in local communities, it is expected that the results of the nutritional survey will be made available to determine whether the nutritional status of the families involved in the project has improved. However, this data was not yet available at the time of the evaluation.
85. The rating for the effectiveness criteria is highly satisfactory.

3.3 Efficiency

86. The project had two implementation modalities at different times. The first was the OPIM, which spanned from the start of the project until May 2018. The second was the direct execution modality (DEX), which was implemented by FAO beginning in June 2018 and maintained until the technical closure of the project. Each implementation phase is analysed below.

3.3.1 OPIM modality

Finding 15. The design of the project was pre-OPIM, so its formulation did not have to comply with the rules indicated in Section 701 of the FAO manual for the selection of the operating partner. This meant that there was not enough clarity on the requirements that the partner would have to meet.

Finding 16. The operating partner implemented complex administrative processes, which made it difficult to meet the goals under the pre-OPIM modality. This led to the change of implementation modality in 2018, from pre-OPIM to DEX.

87. The project was approved for implementation in 2014. FAO issued Section 701 of its operational manual, which sets out the framework, rules and accountability for OPIM, in 2015. Therefore, this project can be considered pre-OPIM. Nevertheless, the essential characteristics of the OPIM modality are found in these pre-OPIM projects. Thus, the reasons that led to the selection of this modality by the government partner, according to the interviews, were based on the possibility of strengthening national capacities through the execution of this type of project and making the most of the resources provided.
88. With the project being pre-OPIM, *ad hoc* procedures were followed during formulation for the selection of the operating partner. This meant that there was a lack of clarity on the important requirements that an operating partner would have to meet. According to the fiduciary assessment, EMAGUA's fiduciary risk was rated as moderate and, specifically, low in relation to financial management, accounting and procurement. However, in general, EMAGUA's administrative procedures were complex, which is why the progress in obtaining the project's committed outcomes was negatively affected. In the first Programme Implementation Report (PIR), which covered the period from July 2016 to 30 June 2017, progress towards achieving results and meeting project objectives was rated as unsatisfactory. The report indicated the need to review the implementation modality of the project for the reasons mentioned above. This need was met and, in May 2018, a second amendment²¹ to the Implementation Agreement between FAO and EMAGUA was signed. The objective of the amendment was to reduce the amount of resources committed under the agreement since FAO would be responsible for the execution and direct management of the remaining project activities.
89. It is important to mention that, for both the Ministry of Environment and Water and FAO Bolivia, this project was the first to be executed under this modality. It is also important to note that the current operating partner selection procedures indicated in Section 701 include a thorough analysis of the operating partner's capabilities with respect to its procurement processes, among other aspects.

3.3.2 Direct execution modality

Finding 17. The technical and administrative execution improved substantially under the DEX modality but limited a more active involvement of the General Directorate of Biodiversity and Protected Areas. Potential synergies with other projects of the Ministry of Environment and Water were also reduced.

Finding 18. The Ministry of Environment and Water is interested in executing this type of project directly to strengthen its management and technical capacities.

²¹ The first amendment was made in May 2016 and aimed to reduce the financial contribution that FAO would provide to EMAGUA. FAO would retain USD 126 000 for the implementation of some technical activities.

90. Under this modality, FAO implemented various adaptive measures to improve the project's level of achievement, which are addressed in the section on risks and adaptive management. According to the third PIR (from July 2018 to 30 June 2019), the project began to improve its technical and administrative performance, which meant its progress was rated as satisfactory. However, the sociopolitical conflict that occurred in the country at the end of 2019 caused the project to stop in October and November of that year. The COVID-19 pandemic also temporarily halted activities on the ground in 2020. As a result, the project faced additional delays in its execution that led to its extension by two years and five months. Thus, the technical closure of the project was extended until 30 June 2022. This extension allowed the project to meet most of its goals.
91. According to the interviews, this type of execution was more effective in achieving the results. However, it limited the more active involvement of the General Directorate of Biodiversity and Protected Areas, which was not involved in the direct execution. In addition, it limited synergies with other projects of the Ministry of Environment and Water, which were more likely under the OPIM modality due to the interaction between the officers of the different areas in periodic meetings within the Ministry of Environment and Water. As a result, the Ministry of Environment and Water maintains an interest in implementing projects under the OPIM modality. This, however, would require modifying its regulatory framework to strengthen its processes for the procurement of goods and services.

3.3.3 Governance and interinstitutional coordination

Finding 19. In both execution modalities, decision-making was fluid and framed within the context of each executor. Therefore, in the pre-OPIM modality, synergies were sought with other projects of the Ministry of Environment and Water. Under the DEX modality, synergies were achieved with other FAO projects.

Finding 20. In the two implementation modalities, limited attention was given to the functioning of the steering and technical committees. Shared governance between the Ministry of Environment and Water and FAO was not a regular occurrence in practice, which limited co-responsibility in the execution of the project.

92. Under the pre-OPIM modality, day-to-day decision-making was mainly carried out in the Project Coordination Unit. This was located in the General Directorate of Biodiversity and Protected Areas, and in the Financial Management Unit, which was located in EMAGUA. The Vice Ministry of Environment, Biodiversity, Climate Change and Forest Management and Development participated in making strategic decisions. According to the interviews, decision-making was fluid and considered the context, the needs of the Ministry of Environment and Water, and the potential synergies with other ministry projects. Decision-making was also politically charged as in any government institution. According to the Ministry of Environment and Water, steering and technical committee meetings were held in this phase. However, the meeting minutes were not available, so it was not possible for the Evaluation Team to analyse the performance of these committees and the type of decisions that were made to determine the level of governance.
93. In the DEX implementation phase, the Project Coordination Unit was located in the FAO facilities where day-to-day and strategic project decisions were made. The main context for these decisions was other FAO projects since there was no regular meeting of the committees in this phase (for example, in 2018 and 2019, there is no record of any meeting

of these committees being held).²² Therefore, co-responsibility in project execution became blurred in practice.

Finding 21. The Ministry of Rural Development and Land did not participate in the steering committee, so there was no strategic interinstitutional coordination. However, interinstitutional coordination occurred through the ministry's technical entities and in a timely manner in some areas of intervention. This collaboration generated important benefits, although the benefits anticipated in the PRODOC were greater.

94. The first space for interinstitutional coordination provided for in the PRODOC was the steering committee, which would be comprised of the Ministry of Environment and Water, the Ministry of Rural Development and Land, and FAO. Although the Ministry of Rural Development and Land was not an executing partner, in the PRODOC it appears as co-responsible for three outcomes and ten outputs. In particular, Component 2 included the commitment to sign an institutional agreement between the Ministry of Environment and Water and the Ministry of Rural Development and Land, which would include a strategic and financial plan to expand *in situ* conservation in the potential areas for scaling up the project, which was not achieved. In addition, synergies were not generated with INIAF for the supply of seeds within the framework of management plans for *in situ* conservation, and it was not possible to create links between *in situ* and *ex situ* conservation strategies in the national network of genebanks managed by INIAF. These synergies and links were considered in the PRODOC. In this regard, the lack of participation of the Ministry of Rural Development and Land in the project was identified as a risk in the PRODOC that had materialized at the beginning of the project and went unnoticed by the MTR.
95. According to the interviews, the Ministry of Rural Development and Land decided not to participate in the project or the steering committee. This was due to the fact that some of the project activities were directly linked to its own attributions, resulting in the overlapping of some responsibilities. In this regard, the steering committee was not able to fully function as a space for interinstitutional coordination among all actors.
96. However, there was timely interinstitutional coordination with the technical entities of the Ministry of Rural Development and Land in some areas due to the overlap between the project activities and their functions. Thus, letters of intent were signed between the regional coordinators of the project and the Local Operating Unit of the Ministry of Rural Development and Land, as well as with the departmental head of INIAF Pando in the Amazonia. This was done in order to complement and strengthen their combined efforts. Socialization, training and the exchange of experiences were also carried out with IPDSA within the framework of the Ministry of Rural Development and Land's National Programme to Support the Production and Collection of Amazonian Fruits (açai, copoazú

²² Despite the importance of discussing the methodology and coordination that should have existed during the phase of direct implementation by FAO, there is no record of any meeting of these committees in 2018 and 2019. In 2020, there are minutes of only one meeting of the technical committee, which addressed the recommendations of the MTR and the appropriate response. In 2021, four meetings of the technical committee and one of the steering committee were held. At the steering committee meeting, the 2021 Annual Operating Plan was approved and suggestions for additions were made. The technical committee meeting minutes show technical discussions and effective interaction between the Coordinating Unit of the FAO project and the General Directorate of Biodiversity and Protected Areas of the Ministry of Environment and Water, which had been absent in previous years.

and majo) and the National Programme to Support the Production and Collection of Cocoa in the same region. According to the interviewees, this work allowed IPDSA to cover more communities than initially planned.

97. In addition, the National Council of Organic Production (CNAPE) and SENASAG of the Ministry of Rural Development and Land also participated in the project through trainings and advice on PGS and the Food Safety Certification for the economic associations that took part in the project. Their participation helped to ensure that the CNAPE met its PGS goals. In fact, of the 44 current PGS, 6 were developed within the framework of the project and its annual goal was to achieve 14 PGS. In the case of SENASAG, the collaboration allowed it to adapt the requirements for the food safety certification of products by Community Economic Organizations through Resolution 134. The collaboration also led to the development of a standard for laboratory tests adapted for the Plurinational State of Bolivia, and work on specific standards for moriche palm and majo pulp.
98. These benefits would have been greater if this collaboration had been planned and implemented in the other macroregions, while also avoiding the duplication of work. For example, in Chaco, a maize germplasm bank was established without the participation of the INIAF, which was primarily responsible for *ex situ* conservation. Therefore, a potential duplication of work was found in the identification of maize species in that germplasm bank. Also, the interviewees mentioned that it would have been more beneficial to know all project activities in order to identify other areas of potential collaboration.
99. In addition, the lack of strategic interinstitutional coordination to address agrobiodiversity at the national level of the project was reflected in the lack of socialization and identification of synergies between the project outcomes and the existing programmes, as well as with those currently being developed. For example, the proposal for the National Agrobiodiversity Programme has not yet been shared with the Ministry of Rural Development and Land and other relevant institutions, such as the Ministry of Productive Development and Plural Economy. Also, within the project framework, the Ministry of Rural Development and Land did not share its 2019 programmes for Amazonian fruits and cocoa with the Ministry of Environment and Water. Currently, the Ecological Agriculture Programme and the National Family Agriculture Strategy are also being prepared without considering relevant inputs or lessons from this project.
100. CT-CONAN played an important role in the activities of Component 3 by providing a multisectoral platform and contributing to the interinstitutional coordination of the project with departments and municipalities in the five macroregions. At both of these levels, multiple agreements and interinstitutional partnerships were established, which are addressed in the section on project associations and stakeholder participation.

3.3.4 Risks and adaptive management

Finding 22. The project was able to implement highly effective measures to address the implementation modality change, the COVID-19 pandemic, and changes in the government and members of the executing team. This is shown by the level of achievement obtained by the project, despite these challenges.

101. Since the fiduciary risk assessment carried out during project formulation did not identify any specific risk in the EMAGUA procurement system, the PRODOC fiduciary risk mitigation plan did not include any related mitigation measure. In this regard, the plan was not very useful in addressing the difficulties faced by the project in the pre-OPIM implementation

phase. This led to the modality change. Faced with this situation and in order to increase the project achievement level, FAO, as the executing agency, implemented different adaptive measures that were highly effective and contributed to improving the project's technical performance. These measures included:

- i. the turnover of professionals to ensure the required technical level;
 - ii. adjustments to the organizational structure, particularly an increased number of field professionals through the hiring of extension technicians (each macroregion had a regional coordinator and two professionals, one specialized in the processing of fruits and vegetables and the other an expert in marketing. In addition, there were two professionals – an expert in nutrition and another in communications – who supported the five macroregions);
 - iii. the creation of alliances with universities, local technical centres and other civil society organizations, which contributed additional resources and infrastructure for the development of specific activities;
 - iv. hiring a monitoring expert and developing a results-based monitoring system; and
 - v. strengthening logistical resources (for example, transport for local professionals) to improve field work.
102. A risk identified in the PRODOC and one that materialized in practice was the limited participation of the Ministry of Rural Development and Land, including the INIAF (seed bank), in the project. This led to missed synergies between both ministries and the lack of coordination between *in situ* and *ex situ* conservation of agrobiodiversity species.
103. The rating for the efficiency criteria is moderately satisfactory.

3.4 Sustainability

3.4.1 Institutional sustainability

Finding 23. The level of ownership over the project outcomes by the main government partner of the project is high. In fact, it internally approved the proposal for the National Programme for Sustainable Management of Agrobiodiversity 2022–2027, which is expected to continue the achievements of the project and expand its scope.

Finding 24. The project faced significant difficulties related to interinstitutional coordination, which persist in the actions proposed to give continuity to the achievements obtained. This means that there is an ongoing institutional risk that could affect the sustainability of project results.

3.4.1.1 National level

104. The Ministry of Environment and Water, as the main partner of the project, has shown a high level of ownership of its results. In fact, it internally approved the proposal for the National Programme for Sustainable Management of Agrobiodiversity 2022–2027. This was prepared by the project as a co-benefit. It is expected that this programme will give continuity to all actions carried out within the project framework. It should also ensure the sustainability of achievements since it will work with the same associations and productive organizations, in addition to others, and cover a greater geographical area. According to the interviewees, the programme is expected to be financed by the European Union and have a budget of BOB 74 929 319 (approximately USD 11 million). The proposal is expected to be circulated shortly for approval by the Ministry of Development Planning and the European Union.

105. Despite the effective collaboration in the field between the project and the entities of the Ministry of Rural Development and Land, such as SENASAG, IPDSA and CNAPE, and the clear points of convergence of the project with the competencies of the Ministry of Rural Development and Land and its national programmes (related to Amazonian fruits, cocoa, Andean grains, and tubers and roots), it is considered that the programme proposal still needs to be strengthened to avoid the risk of the lack of interinstitutional coordination affecting the sustainability of project achievements. The areas of convergence identified between the proposed programme and the programmes of the Ministry of Rural Development and Land are: productive intensification, organic production, *ex situ* conservation, the promotion of family farming, and market consolidation.
106. Currently, the programme proposal does not include the progress made in this area by the Ministry of Rural Development and Land nor the areas of potential collaboration and coordination mechanisms. Although the proposal indicates the INIAF and SENASAG as co-responsible actors in programme execution, it is necessary to clearly establish the actions and responsibilities of each entity. Otherwise, there is a risk that the implementation of the programme will not be carried out in a planned and coordinated manner, as in this project. The programme objective to promote integrated management policies for the conservation and sustainable use of agrobiodiversity may not be met.
107. The risk of a lack of interinstitutional coordination is also based on interviews carried out with the productive associations of the Amazon. The associations highlighted their concern about the Ministry of Productive Development and Plural Economy's initiative to build a pulping plant in the Amazon. This would affect their local enterprises and, consequently, the project achievements, including the aforementioned proposal of the Ministry of Environment and Water's agrobiodiversity programme.
108. To reduce this risk, there should be mutual feedback with the following programmes and strategies that are in the process of being developed and have clear potential synergies with the proposed programme of the Ministry of Environment and Water: the Organic Agriculture Programme and the National Family Farming Strategy, both under the Ministry of Rural Development and Land, as well as the CT-CONAN multisectoral food and nutrition plan.
109. The project has generated experience in interinstitutional collaboration at the sectoral and territorial levels (for example, CT-CONAN). It was possible to involve decentralized institutions of the national government to achieve results and coordinate actions with local governments. Therefore, this experience can be used to strengthen the proposal of the Ministry of Environment and Water programme and promote interinstitutional coordination.
110. In addition, the SNIAgBD, which was generated by the project and is currently in the pilot stage, could be established as a tool that facilitates knowledge management and communications. At the same time, this could enable the flow of information and documents between institutional actors and academics linked to agrobiodiversity.

3.4.1.2 Municipal level

Finding 25. At the municipal level, all officers interviewed recognized the importance of agrobiodiversity for their respective territories. A high degree of ownership was shown by some officers, with 15 municipal laws related to agrobiodiversity and healthy eating being approved.

Finding 26. The risk of non-compliance with municipal laws and initiatives achieved by the project due to the lack of training or technical advice was identified as low. In fact, there are other projects and initiatives that could provide support.

111. Representatives of ten municipal governments, mainly mayors, were interviewed. They had varying levels of participation in the project, with some participating very actively and others with only limited participation. However, all of the officers interviewed recognized the importance of valuing their local resources and products to improve the health of the inhabitants and promote the local economy, especially families and women with limited resources.
112. As a result of their commitment, 15 municipal laws were passed to promote healthy eating through the formation of COMANs. The officers also expressed that they have scarce resources and, therefore, require national and international collaboration to implement the laws, mainly in terms of resources for training and technical advice.
113. Given the technical collaboration observed in the field, the Evaluation Team considers that these needs could be covered through ongoing FAO projects and initiatives. This includes the “Forest and farm facility phase II: Climate-resilient landscapes and better livelihoods” project, which will end in 2025, as well as other possible projects in cooperation with the German Development Agency or with technical assistance from FAO. Municipal governments could also continue receiving the support of NGOs, some of which have engaged in effective collaboration within the project framework. In addition, if the agrobiodiversity programme of the Ministry of Environment and Water is approved, the municipal governments could also have another source of support.
114. The project team informed the Evaluation Team that it would hold closing events in each macroregion. The outputs generated would be communicated and FAO, in particular, would announce some initiatives that could give continuity to the project’s achievements.

3.4.2 Social sustainability

Finding 27. The associations, organizations and communities that participated in the project show a high degree of ownership of its outcomes.

Finding 28. All representatives of the associations and organizations interviewed expressed important needs which, if not met, could lead to the risk of the progress achieved through the project being lost or diverted towards unsustainable or unhealthy practices.

115. The project worked with 28 associations, organizations and communities, as well as 3 Community Economic Organizations, 2 indigenous communities (including the Amandiya Community Economic Organizations formed by an indigenous community) and 24 community associations. During the evaluation process, the team interviewed representatives and members of 16 groups (57 percent) of the 28 registered. During the interviews, it was identified that all of these groups have a high level of ownership of the general concept of agrobiodiversity, the transformation processes learned and the commercial activities undertaken. The identified main factors that contribute to this level of ownership are the following: i) the revaluation of traditional crops and fruits through knowledge of their nutritional value and the awareness raised by the COVID-19 pandemic regarding the importance of eating healthy food; ii) the possibility of obtaining income from the sale of agrobiodiversity products; and iii) the respect shown by project participants for the traditional customs and practices of the communities, and the

generation of spaces for broad participation and consultation to reach agreements on project activities.

116. Of the 28 associations or organizations, 22 are legal entities (79 percent) which, in some cases, is a requirement for the organization to receive government support. However, the level of development of each association or organization is variable. For example, the Amandiya Community Economic Organization, which obtained PGS certification in 2018 and was formally created as a community organization with 155 members in January 2022, now has 26 products derived from algarrobo and cucurbits, some of which have food safety certification. For its part, the Achachairú Association of Women Processors, created in 2020 and made up of 12 women, does not yet have legal status, equipment or a fixed space to make its products, which still do not have food safety certification. One of the members interviewed in Chaco said: "We started from scratch and we need advice."
117. Although the development level of the enterprises is variable, all representatives of the associations and organizations interviewed expressed important unmet basic needs, such as having a physical place for their venture and more specific training on accounting and administration. For example, some of them stated that they did not know how to distribute the money from their earnings. Others require support to improve the quality of their products as some still contain a high level of sugar and, therefore, cannot obtain the food safety and ecological certification.
118. Of the total 92 products produced by these groups,²³ only 38 percent have food safety certification to ensure the quality of the products and their nutritional value (for example, high nutrient content and low sugar content). Under this scenario, there is a greater risk for less developed associations. If support is not continued through other interventions, then the level of ownership achieved could be lost (for example, by those associations that do not have a physical location or basic production equipment) or diverted towards unhealthy products because they do not have food safety certification.

²³ During the review of the evaluation report, the project team informed the Evaluation Team that the total number of food products that have standardized processes and are marketed by the associations correspond to 50 products. These are classified as follows: 11 processed products (with food safety certification and nutritional labelling) based on açaí, majo, palqui, Bolivian mountain coconut, maize and amaranth pulp; 27 processed products (with the Unique National Registry of Sustainable Family Farming for their commercialization) based on algarrobo, mistol, Bolivian walnut, guapuru, maize and cumandas; and 12 processed products (without nutritional labelling) based on achacana, cañahua, tarwi, isaño and cherimoya crespa.

Figure 4. Example of an agrobiodiversity product in the Valles macroregion

Source: FAO. 2022. Photo taken by the project team. Bolivia.

Finding 29. Capacities were generated, although to different degrees, at the individual and organizational levels in the groups participating in the project. A favourable environment was created for the application of the capacities developed during the project.

119. Although to different degrees, the training strategy achieved capacity building at the individual level. According to the survey carried out by the Evaluation Team, 35 out of 47 people surveyed (74 percent) stated that the training sessions had been very useful and 11 out of 47 (23 percent) indicated that the training sessions had been moderately useful. In particular, the use of the acquired knowledge is evident in the processing of products that the participants learned to make and the awareness that the interviewees expressed about the importance of protecting the forest or applying good practices to their crops. Also, the survey indicates that 98 percent of those surveyed have increased the consumption of fruits or vegetables from agrobiodiversity as a result of the project.
120. However, the survey also detected that there is still confusion about terms and that the benefits of agrobiodiversity are not so clear for all association and organization members. The interviews and survey results helped to identify areas of knowledge that need to be strengthened or created. Indeed, the training was not provided homogeneously to all associations and more time is required to achieve complete assimilation of all the knowledge shared. Some topics that require more in-depth training in some associations are: marketing, accounting and administration, as well as nutrition and healthy product formulation. In addition, since the management and production plans were recently created, monitoring is required for effective implementation by associations and organizations.
121. The project has also generated capacities at the organizational level for the operation of the enterprises. In particular, it has provided general training on marketing and business ventures and promoted the pursuit of legal status for associations and organizations. It has also provided training on certification procedures, such as obtaining food safety and PGS certifications through CNAPE and SENASAG, respectively, which facilitates the commercialization of manufactured products.

122. Further, the project generated a good environment for the capacities developed. It supported 15 municipalities and one department (see Appendix 5) in passing laws for the formation of COMANs and the promotion of healthy consumption and enabled local governments to purchase agrobiodiversity products for school breakfasts. The project also provided basic operational equipment for the enterprises of some associations and organizations. However, it is important to mention that not all municipalities were able to generate this favourable environment.

Finding 30. The FAO “Forest and farm facility phase II: Climate-resilient landscapes and better livelihoods” project is providing support to the Agricultural Association of Amazon Producers of Majo and Açaí in Buen Retiro. It is expected that support will also be provided to other groups participating in the project, which may contribute to the sustainability of their enterprises. In addition, there are other initiatives that could benefit local associations.

123. FAO, through the “Forest and farm facility phase II: Climate-resilient landscapes and better livelihoods” project, is already supporting AAGROPAMA, which participated in the project. In particular, the association received support to strengthen the organization’s institutional framework (for example, obtain legal status) and adapt the plant to increase its productive capacity. According to the interviewees, it is expected that this initiative will also support ASICOPTA, the productive associations of the Santa Rosa de Abuna Integral Management Area and the Federation of Açaí and Amazonian fruit producers of the Pando department. In addition, ASICOPTA plans to request support from the Ministry of Rural Development and Land for the development of 3 ha of agroforestry systems. As previously mentioned, through the National Agrobiodiversity Programme, the Ministry of Environment and Water plans to continue supporting all groups that have participated in the project.

3.4.3 Financial sustainability

Finding 31. The actions initiated by the project can be financially sourced by initiatives and mechanisms, which include current FAO funding for the continuity of some of these actions.

124. The associations need to increase their productive capacities. Therefore, they must strengthen their administrative and commercial capacities, their operating capital, their linkages with the market and their overall investment (for example, in equipment). In this regard, funding sources were identified that could contribute to the continuity and sustainability of the actions initiated. One of the main sources is the European Union, which is expected to finance the National Programme for the Sustainable Management of Agrobiodiversity 2022–2027 of the Ministry of Environment and Water, contributing approximately USD 11 million. This funding commitment is expected to be formalized in 2022. Further, as previously mentioned, FAO is providing resources through the Forest Mechanisms Programme to support some of the groups that participated in the project to strengthen actions initiated during its implementation.

3.4.4 Environmental sustainability

Finding 32. Through a process of sensitization and training, the project raised environmental awareness in associations and productive organizations about native crops and caring for forests with wild species important for agrobiodiversity. In addition, it generated support material to guide this process.

Finding 33. Although the management plans developed by the project include measures for the conservation and sustainable use of wild species, there is an opportunity to strengthen them and

mitigate the environmental risk that could cause the increase of wild species with commercial value in the ecosystems of the territories of intervention.

125. According to the interviews carried out, all associations and productive organizations interviewed (16 groups) are aware of the importance of conserving the forests where wild fruits grow and ensuring the sustainable production of their native crops. Some of these groups received training and guidelines on the sustainable production of fruits and native crops.
126. In some regions affected by the project, the conservation and sustainable use of wild resources was formalized through management plans (see Output 2.1.2 in the section on efficiency and in Appendix 5), as required by the project. Four of these plans have been formally approved and four are still in the approval process.
127. The environmental sustainability section of the PRODOC acknowledges that many agrobiodiversity species are considered wild and grow in their natural habitat. This means that they contribute to maintaining the ecological balance and, therefore, should be analysed and protected by the activities carried out within the project framework. In this regard, the management plans should contribute to maintaining the ecological balance in the areas where wild species are harvested. The management plans for Charagua Norte, Ibasirri and Machareti (which were in the approval process at the time of this evaluation) and the management plans for Sinai and San Crucito²⁴ recommended the production of seedlings in nurseries and the reintroduction of commercially valuable native species to the forests. However, they did it with no analysis nor measures to protect the ecological balance. For example, the Management Plan for Non-timber Forest Products of Guapurú (*Plinia cauliflora*) and Sahuinto (*Myrcianthes callicoma*) in the North Charagua Zone of the Charagua Iyambae Indigenous Territory indicates the following: "This plan proposes the operation of a nursery for wild fruits [...] that will also serve for the production of seedlings to be used [sic] in plantations in the same forest or, where appropriate, in permanent plots as part of agroforestry systems. The purpose is to increase the population of economically important species to process these products for human consumption."
128. The Lead Technical Officer (LTO) did not have the opportunity to review and provide feedback on the management plans. Notwithstanding, the LTO considered that this proposal for the development of commercial native species could jeopardize the ecosystem. Indeed, a currently missing study based on a landscape approach would allow for a more holistic vision. This would aim at balancing the increase of economically important species with other native species that have no commercial potential but are still important for the ecosystem. In this regard, management plans should take into account the conservation and sustainable use of the forest, with clear protection and management measures beyond short-term economic benefits.
129. It is understood that these management plans were prepared in accordance with the environmental requirements established by the Authority for the Inspection and Social

²⁴ These include: the Management Plan for Non-timber Forest Products of guapurú (*Plinia cauliflora*) and sahuinto (*Myrcianthes callicoma*) in the North Charagua Zone of the Charagua Iyambae Indigenous Territory; the Management Plan for Non-timber Forest Products of cupesi (*Prosopis alba*) and mistol (*Ziziphus mistol*) in the community of Ibasiriri–Alto Isoso, Charagua Iyambae territory; the General Plan for Non-timber Forest Management of the Brazil nut (*Bertholletia Excelsa Humb. et Bonpl.*) of the San Crusito Campesino Community; and the Brazil nut (*Bertholletia Excelsa Humb. et Bonpl.*) Management Plan in areas larger than 200 ha of the Sinai community in the department of Pando.

Control of Forests and Lands. However, as indicated by the LTO, there is the possibility of complementing the management plans through a landscape approach.

130. The rating for the sustainability criteria is moderately likely when considering the financial, institutional and governance, and environmental risks that were identified in the evaluation.

3.5 Factors affecting performance

3.5.1 Project design and implementation

Finding 34. Although some goals and the geographic coverage were ambitious, the project's structure and components were appropriate for the achievement of its objectives.

Finding 35. The Ministry of Rural Development and Land played a considerable role in the project, and its timely participation, such as in addressing issues and being co-responsible for some products, achieved several benefits. Accordingly, it is considered that the ministry should have played a more strategic role in the project, together with the Ministry of Environment and Water.

131. The project design uses a vertical logic. Its activities are consistent with its goals and contribute to the achievement of outputs. This, in turn, contributes to the fulfilment of the outcomes that align with the overall project objectives. For their part, the project objectives are relevant considering the problems they seek to address. However, some of the goals and the geographic coverage of the project were overly ambitious and led to the modification of the results framework in response to a recommendation from the MTR.
132. The role of the Ministry of Environment and Water within the national executive branch influenced the project design to address the following issues: food and nutrition insecurity; agrobiodiversity and the genetic erosion of crops; and climate change. Given the relevant responsibilities of the Ministry of Rural Development and Land in these areas (shared with the Ministry of Environment and Water), it is considered that the ministry should have played a more important role in the project, in addition to being considered an important co-financer.
133. This consideration is also based on the activities and shared responsibility entrusted to the Ministry of Rural Development and Land and its technical entities in the three technical components of the PRODOC, with greater co-responsibility in Component 2 (Table 4).

Table 4. Outcomes and outputs with co-responsibility of the Ministry of Rural Development and Land

Output 1.1.1 National Information System on Agrobiodiversity	Outcome 2.2a on increased income in the participating communities
Output 1.1.3 on the selection of ecotypes and local crops	Outcome 2.2b on the areas under agrobiodiversity production standards
Outcome 2.1 on <i>in situ</i> conservation of local ecotypes	Output 2.2.1 related to the certification of agrobiodiversity products
Outputs 2.1.1, 2.1.2, 2.1.3, 2.1.4 and 2.1.5 that address conservation methodologies and practices, the development of management plans and the identification of good management practices, the strategy and plan for scaling up, and an agrobiodiversity monitoring system	Output 2.2.2 on the commercialization of agrobiodiversity food products
Output 3.1.1 on the multisectoral platform established for the promotion and monitoring of agrobiodiversity in relevant policies	

Source: Elaborated by the Evaluation Team.

134. Furthermore, the limited participation of the Ministry of Rural Development and Land in the project risked lost opportunities for synergies between the two “projects” (meaning, of course, the two ministries), as well as a lack of coordination between *in situ* and *ex situ* conservation.
135. The Ministry of Rural Development and Land participated in some project activities with positive results. Notwithstanding, it would have played a much greater role if it had participated in all of the outputs indicated in Table 4, and if this had been planned through the steering committee. In fact, as indicated in the section on efficiency, the ministry did not participate in the committee.
136. The importance of the Ministry of Rural Development and Land’s participation in developing the project should have been recognized by giving it a more strategic role and obtaining resources to support and strengthen its responsibilities and activities. In addition, FAO could have acted as a mediator between the separate visions of the Ministry of Rural Development and Land and the Ministry of Environment and Water. In this regard, the project missed the opportunity to advance towards an integral approach in the implementation of environmental and production policies, which could have benefited both sectors.
137. Another important issue to address regarding project design refers to the implementation modality, which was a pre-OPIM modality. In fact, there was still no clarity on: i) the primary requirements that the operational partner should meet; and ii) the necessary characteristics of the project design, considering the operating partner would not have the same facilities and infrastructure as FAO for the procurement and contracting of services.
138. The rating for the project design is moderately satisfactory.

3.5.2 Monitoring and evaluation system

Finding 36. The project’s monitoring and evaluation (M&E) plan contains the elements for the comprehensive monitoring of the project. However, areas for improvement are found in the design of the results framework linked to the indicators and targets.

Finding 37. The plan was not totally on schedule due to the change in modality and the COVID-19 pandemic, which had significantly limited field supervision visits.

Finding 38. A monitoring system was developed under the DEX modality. Although there was an opportunity to make the system more strategic, this development facilitated results management and supported project decision-making.

139. The M&E plan for the project meets the requirements outlined in the GEF Monitoring Policy to provide the necessary elements for full monitoring of the project. As a base element for monitoring, the results framework presents a vertical logic and its structure complies with the concepts of a logical framework matrix. However, its design has some areas for improvement, which were not indicated during the MTR. These include the following:
- i. There is no description of the indicators. The “indicators” column includes the description of the outcome or output, which causes confusion.
 - ii. In some cases, the outcome or output contains the goals to be achieved, which are not included in the goals column. For example, Outcome 2.1 mentions that *in situ* conservation will be practiced in 50 communities, along with other requirements to be met. However, the goal does not mention this requirement.

- iii. For most outcomes and outputs, more than one goal is included. For example, Output 1.1.2 includes five goals and, within one goal, it includes another subgoal (the goal is the percentage increase in food consumption in five communities and the subgoal is that 50 percent of the people registering this increase are women). This situation makes monitoring the project complex because, in addition to not having clear indicators, there are a large number of goals that have to be monitored. This complexity detracts from the strategic results framework, given that there is no single strategic goal that unequivocally shows that the outcome or output has been achieved. This situation is reflected in the monitoring system that was developed by the project, which will be addressed later.
- iv. In some cases, the output contains two embedded indicators, but the goal only corresponds to one of them. As a result, the monitoring of compliance with the other indicator is not carried out. This is the case for Output 2.1.4, which states: "Joint strategic plan of action financed by the Ministry of Environment and Water and the Ministry of Rural Development and Land to expand *in situ* conservation and the sustainable use model developed by the project (in at least 125 additional communities)." The goal for this output is "125 additional communities in the municipalities identified by the project have implemented agrobiodiversity management plans," which means that the monitoring of compliance to ensure that both ministries have implemented and financed a joint strategic plan of action was not conducted.
- v. One of the goals of Output 1.1.2 is repeated in the goal of Output 1.1.4.

3.5.2.1 Monitoring system implementation

- 140. There is no evidence that a monitoring system existed under the OPIM modality. This may explain why the information generated by the project at that stage was scarce or unavailable. The latter includes a report on the project launch workshop and the minutes from the steering and technical committee meetings held during that phase. According to the interviews, these actions were carried out as part of the M&E plan, but there is no evidence of this.
- 141. Under the DEX modality, and starting in the first half of 2020, a monitoring system for outcomes and outputs was developed using an Excel spreadsheet with a traffic light-type colour system to indicate the level of compliance. The system was structured in a more detailed way in response to an MTR recommendation and is updated monthly based on the reports provided by the regional coordinators.
- 142. Since the results framework does not describe the indicators, these were inferred in the monitoring system based on the goals. Additional indicators were also incorporated, which in some cases correspond to milestones in the results framework and activities aimed at these milestones or goals. Thus, the monitoring system is made up of 93 indicators. Each output of the adjusted results framework can have between 2 and 7 indicators and, in most cases, the average of all indicators was calculated in order to estimate the level of compliance. Although this system served to establish results-based management and evaluate the progress of the project in a timely manner and supported decision-making, there was an opportunity to take a more strategic approach. Among the multiple indicators for each outcome or output, some are strategically more relevant, but their importance is blurred by taking the average of all activities. In addition, keeping the indicators updated requires a significant amount of work, considering there are 93 indicators.

143. The annual PIRs have been completed. They objectively report the progress of the project. However, the report on environmental and social safeguards lacked formality. The main technical supervision has been carried out by the LTOs and, according to the first LTO, a field visit took place under their technical supervision – even though the report generated during that visit is not available. After that, no more field visits were made due to the COVID-19 pandemic. The GEF tracking tools have also provided feedback, and the analysis of this information is addressed in the section on effectiveness.
144. The MTR was carried out in 2020, four years after the official project launch and two years after the modality change. This represents a significant delay. As a result of the MTR, nine recommendations were issued, of which six have been met. These include the following: changing the results framework; strengthening the monitoring system and adopting a gender approach; promoting local agreements; and increasing the presence of specialists and professionals on the ground. The recommendations that required greater effort to be implemented include: strengthening the managerial and administrative capacities of some associations and organizations; homologating the standards for food analysis; and implementing the National Information System on Agrobiodiversity.
145. The M&E rating is moderately satisfactory.

3.5.3 Quality of execution

Finding 39. Execution was ineffective under the pre-OPIM modality. This was due to the lack of clarity on the requirements for operational partners. However, execution under the DEX modality was characterized by strategic coordination, results-based management, adaptive capacity and a high-level professional team.

146. Under the OPIM modality, EMAGUA was the executing partner in charge of resource management and administration, while the General Directorate of Biodiversity and Protected Areas was in charge of technical execution. As indicated in the limitations of the evaluation, it was not possible to contact the EMAGUA personnel who had participated in the project due to a turnover during the project cycle. However, based on the interviews, the PIRs and the MTR, it was confirmed that the main aspect that affected their performance as executing partner was the complexity and duration of their regulatory processes for the acquisition of goods and services, as well as the lack of management experience with this type of project. The Evaluation Team did not have access to the financial reports provided by EMAGUA. However, the interviewees reported that the financial information presented areas for improvement, which followed the change of modality. In addition, according to the interviews and the documentation review, once the General Directorate of Biodiversity and Protected Areas had the minimum technical staff, it began to generate results that led to the evaluation of the project progress as moderately satisfactory in the second PIR. However, the General Directorate of Biodiversity and Protected Areas recognized that it was not possible to advance at the expected pace due to the administrative processes that still had to be completed.
147. FAO has executed the project under the DEX modality since the second half of 2018. The project coordination team adopted a strategic vision focused on results-based management and comprehensive monitoring of the project, which allowed the implementation of adaptive measures. This significantly increased the level of achievement of the project, as well as the number of partners. However, as mentioned in the section on

efficiency, the effective shared governance between FAO and the Ministry of Environment and Water was not prioritized during project implementation.

148. All representatives of government institutions, economic associations and civil society organizations recognized the technical quality of the professionals in the field. The change in implementation modality and the effect of the COVID-19 pandemic produced discontinuity. In fact, these events led to staff turnover. No observations on the financial management of the resources were identified.
149. The main aspect that affected the project's level of achievement under the pre-OPIM modality was the lack of clarity on the requirements for the Ministry of the Environment and Water as an operating partner. However, as indicated in the section on efficiency, this modality fostered the ministry's active participation and interaction between its different areas. As for the DEX modality, the main characteristics of its implementation were strategic coordination, results-based management, adaptive capacity and a highly professional team. Despite this, the rating for execution is moderately satisfactory. In fact, at the beginning of the project, the level of achievement of outcomes and outputs was limited by the complexity of the executing partner's administrative processes. Although the level of achievement increased when the modality changed from pre-OPIM to DEX and, as mentioned in the section on efficiency, the effectiveness of the project increased, the participation of the government partner was reduced. This, in turn, limited its capacities to execute projects on a similar scale.

3.5.4 Quality of implementation and execution

Finding 40. Project identification, supervision and technical assistance provided by FAO has been carried out for the most part effectively, with some areas for improvement in the project design.

150. FAO, in its role as implementing agency, identified a priority project for the Plurinational State of Bolivia although it shares, together with the Ministry of Environment and Water, the areas for improvement identified during the project formulation phase. Regarding the technical assistance and supervision of the project, it is worth noting that, since the first PIR, FAO has highlighted the areas for improvement in project execution and indicated the need to change the implementation modality. This change was achieved in the second year of project execution.
151. It is important to indicate that during project execution there were two LTO replacements. The first LTO participated only in the design of the project. The second LTO participated at the beginning of the implementation, and the third LTO completed the implementation of the project. Each LTO provided adequate technical supervision. In fact, the project did not generate an adverse effect on the environment or the communities that had interventions. Nonetheless, personnel changes were made without an adequate transfer of relevant project information. In particular, the last two LTOs were unsure as to whether or not an environmental risk assessment had been conducted during the project design. This lack of information was reflected in the filling out of the environmental and social safeguards section of the PIR, which had confusing information.
152. It is also important to note that the third LTO did not have access to the management plans generated by the project. The LTO suggested strengthening the content of some of these plans in a subsequent review. This situation led to a recommendation and a lesson learned, which is included in this evaluation. Finally, only one technical supervision field visit is

known to have taken place due to the mobility restrictions imposed by the COVID-19 pandemic.

153. The rating for the implementation and execution criteria is considered satisfactory.

3.5.5 Financial management and mobilization of expected co-financing

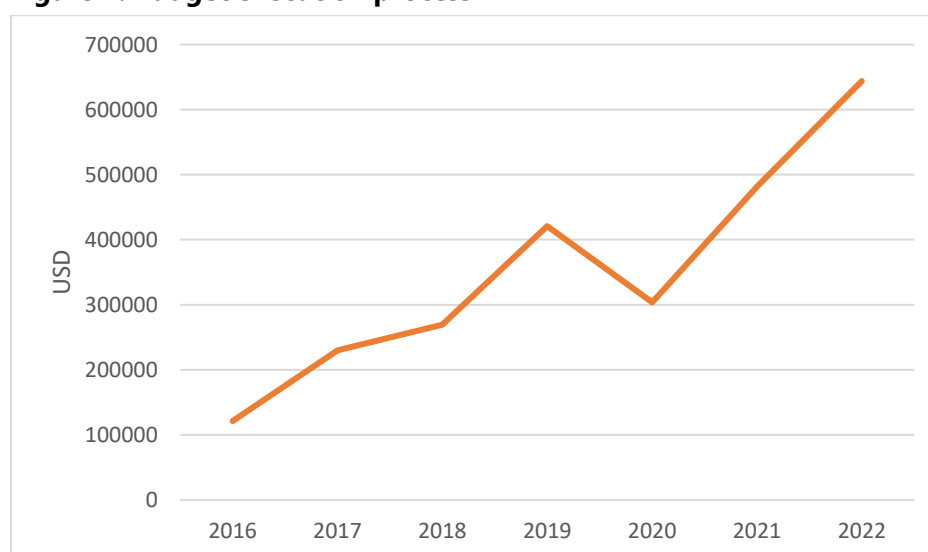
3.5.5.1 Financial management

Finding 41. The project budget was designed to comply with the work plan. However, changes to some outputs of the results framework and additional co-financing obtained by the project, among other factors, made it possible to achieve most of the goals and – in some cases – exceed them.

154. The project received a GEF grant of USD 2.6 million for its execution which, combined with the committed co-financing of USD 13 865 021, meant that the total budget for the project reached USD 16 715 021. According to the data provided by FAO Bolivia, as of 31 December 2021, a total USD 2 386 514.66 of the GEF grant had been spent, which corresponds to 92 percent of the total budget.

155. During the pre-OPIM implementation modality, EMAGUA executed 13.5 percent of the budget, that is USD 350 006.96, and FAO was responsible for the execution of the remaining amount. The details of the budget execution are presented in Figure 4. According to the MTR, the first disbursement from FAO to EMAGUA was made in November 2016, nine months after the execution agreement was signed. This was due to necessary administrative processes (for example, the signing of interinstitutional agreements and the opening of a special bank account for the project, among other requirements). These nine months to receive the funds were added to the four months spent on hiring the first project coordinator, meaning the project began its technical operation 13 months late. The figure shows the effect of the 2018 modality change on the budget, the sociopolitical conflict that occurred at the end of 2019 and the COVID-19 pandemic in 2020.

Figure 4. Budget execution process



Source: Elaborated by the Evaluation Team with information provided by the project team.

156. The project budget was designed to cover the work plan. It considered the time that had elapsed from the beginning of the project design in 2011 to its approval in 2014, the

signing of the Execution Agreement in 2016 and the start of the technical work in 2017. However, the budget was insufficient to cover the work plan. This was due to the inclusion of some ambitious goals and the broad geographical coverage of the project. These were contemplated in the project's design and led to a change in the results framework in response to a recommendation by the MTR. However, the additional co-financing obtained by the project, through cooperation with other institutions (see the section on co-financing and stakeholder engagement), as well as the use of existing infrastructure and synergies with other FAO projects and the savings achieved by the project (for example, by reducing travel expenses), ensured that the budget limitations did not have a significant impact on achieving the goals.

157. The financial management rating is satisfactory.

3.5.5.2 Mobilization of expected co-financing

Finding 42. As of 24 June 2022, 63.5 percent of the co-financing had materialized. The lack of full materialization of the co-financing did not affect the project results due to the additional co-financing achieved. However, that amount could increase because some initiatives of the Ministry of Environment and Water have not been considered.

Finding 43. The project received additional co-financing of USD 1 335 867, which corresponds to 9 percent of the total co-financing committed. These additional resources were the result of the new partnerships generated and a greater contribution from FAO.

158. According to the PRODOC, the committed co-financing totalled USD 14 115 021. To determine the co-financing materialized each year, the coordinators of each macroregion made a monthly estimate of the contributions of the project partners, and the monitoring team was in charge of compiling and reporting the co-financing for each partner in the PIR. According to the latest reported figures, as of 24 June 2022, 63.5 percent of the committed co-financing had been materialized. This low level of co-financing is explained by the fact that the Ministry of Environment and Water, which was the main co-financer of the project (the committed contribution was equivalent to 60 percent of the total co-financing), provided only 9 percent of the amount committed (USD 787 572). During project formulation, the Ministry of Environment and Water had considered the execution of another project known as *Biocultura*, which was going to be linked to this project. However, this integration was not achieved and, therefore, this project did not disburse the committed co-financing. In the interviews carried out, the Ministry of Environment and Water reported that it has other initiatives and projects that promote agrobiodiversity and that these would contribute to the project as part of its co-financing. However, by the time the data collection for this evaluation was concluded, the magnitude of the contribution was unclear.

159. The co-financing provided by FAO almost tripled the amount initially committed for the project. According to reported estimates, FAO has provided a total amount of USD 3 780 989 in-kind, up from its initial commitment of USD 1 379 000. This co-financing represents the support that FAO provided to the project through other ongoing projects, such as the "Forest and farm facility phase II: Climate-resilient landscapes and better livelihoods" project, as well as the use of professionals from other projects and a coordinator who did not charge for their services during part of the project cycle, which constitutes part of the savings achieved.

160. It is also important to highlight the additional co-financing obtained by the project through the multiple partnerships with universities, municipal governments and NGOs, and that, as a whole, contributed to achieving the goals. In particular, and according to the project team, the engagement and participation of municipal governments generated an unforeseen co-financing of USD 457 738. Participating universities and training centres provided USD 339 318 as additional co-financing, while NGOs contributed USD 102 451. Other government entities (for example, IPDSA and INIAF) provided USD 278 494 and producer associations provided an additional USD 135 167. The estimated total additional contribution was USD 1 335 867 (9.5 percent). The National Council of Quinoa Traders and Producers was another potential co-financer of the project. However, since the project did not address quinoa directly, the Council decided not to participate.
161. The rating for the co-financing criteria is moderately satisfactory.

3.5.6 Project partnerships and stakeholder engagement

Finding 44. The identification of more key stakeholders in addition to those included in the PRODOC and the collaboration and participation mechanisms implemented by the project were successful. In fact, as a whole, they contributed significantly to the achievements of the project and its co-financing.

162. During project execution, the joint action between academia, the productive sector and governments was promoted in agreements reached on actions to be undertaken. This led to a high level of stakeholder participation in their respective activities.
163. In the project design process, stakeholder participation was mainly through the identification and selection of agrobiodiversity ecotypes. This also involved the identification of main themes, as well as the potential municipalities and key stakeholders for each macroregion. The project proposal was socialized and validated through workshops and meetings with different stakeholders from the macroregions (producer associations, municipal and departmental representatives, and universities and technical training centres) and other national institutions (the Ministry of Health and NGOs) that had been established as part of the implementation proposal.
164. The project worked with 39 municipal governments. The majority of them actively participated in the project actions. Some municipalities, due to the change in government management and technical personnel, showed a low level of participation (for example, the municipalities of Porongo and Puerto Rico), despite the fact that they had expressed their intention to consider agrobiodiversity in their comprehensive territorial development plan for living well. At least six letters of intent were signed with municipalities to formalize their institutional coordination within the project execution framework. These letters of intent consisted of agreements to collaborate on: strengthening the nutrition of local populations; establishing a COMAN; harvesting wild fruits and determining their nutritional composition; harnessing traditional knowledge; and organizing healthy food and seed fairs. The participation of the municipalities was key in achieving the project goals and strengthening a municipal legal and institutional framework to promote healthy eating and the use of agrobiodiversity products, as described in the section on effectiveness, specifically on the promulgation of local laws.
165. According to the interviewees, it was also identified that the departmental governments of Pando and Chuquisaca were actively involved in the project actions. In Pando, an interinstitutional platform was created to implement actions that promote the sustainable

use of açai, Brazil nut and other species of Amazonian agrobiodiversity. In Chuquisaca, the departmental government promoted the creation and strengthening of the COMANs.

166. In all macroregions, local universities and technical centres participated in the project. These included: the Gabriel René Moreno Autonomous University in the Trópico macroregion; the Bolivian Guaraní Indigenous University, the San Francisco Xavier University of Chuquisaca and the Monteagudo Agroindustrial Higher Technological Institute in the Chaco macroregion; the Technical University of Oruro and the Universidad Mayor de San Andrés in the Altiplano macroregion; the Amazon University of Pando in the Amazonia macroregion; and the Tomás Frías Autonomous University and the Monteagudo Higher Technological Agroindustrial Institute in the Valles macroregion. One of the researchers interviewed said: "Direct contact with the municipalities ensured we made fewer mistakes in understanding the context of their reality."
167. These institutions became involved with the project through their research centres and projects, thus generating information on the ecotypes and the characterization of the areas covered by the management plans. Within this framework of collaboration, the Monteagudo Agroindustrial Higher Technological Institute implemented a germplasm bank and the Technical University of Oruro expanded its Andean grain germplasm banks. Teachers, researchers and PhD students participated in these efforts. The project signed memorandums of understanding with these universities to formalize the relationship and the development of joint actions. Follow-up meetings were held with each university on the progress of the activities and agreements. It is important to highlight that the Monteagudo Agroindustrial Higher Technological Institute, the Technical University of Oruro and the Tomás Frías Autonomous University incorporated agrobiodiversity into their research guidelines.
168. One area for improvement in this collaboration involves the lack of continuous and complete information provided to stakeholders regarding the progress of all project activities. For example, at least three stakeholders (including a government institution and two additional partner universities) commented that they were only aware of the project activities in which they participated and that, once completed, they received no further information about the project. In this regard, they mentioned that the project's activity plan should have been shared with all stakeholders to provide a general vision of its scope and identify other potential synergies in addition to monitoring the progress of the activities on a regular basis.
169. Partnerships with NGOs, which were mainly focused on the macroregions of the Amazon and Chaco, include: the Centre for Peasant Agricultural Promotion; the Kolping Foundation; the Centre for Research and Promotion of Smallholder Farmers; the Institute for Humanity; Agriculture and Ecology; the Institute for Rural Development of South America; and the Loyola Cultural Action Foundation. The United Nations Entity for Gender Equality and the Empowerment of Women also participated in the joint work in the Amazon macroregion, as described below.
170. NGOs, the United Nations Entity for Gender Equality and the Empowerment of Women, and municipal governments combined their investments and technical activities according to their own projects and initiatives in the Amazon macroregion. For example, the Association of Collectors and Processors of Amazonian and Exotic Fruits (ARPF AE) of the Santa María community, located in the Amazon, benefited from the donation by the

Riberalta municipal government of space for a municipal kitchen. For its part, the Centre for Research and Promotion of Smallholder Farmers provided resources for the adaptation of the space and creation of the açai processing plant. The United Nations Entity for Gender Equality and the Empowerment of Women provided training and clothing for harvesting the fruits. The project also provided basic equipment such as scales, measuring equipment and a pulper, among other items, as well as training on açai nutrition and processing procedures.

171. In Chaco, the Centre for Research and Promotion of Smallholder Farmers and the Institute for Rural Development of South America participated in the institutional spaces promoted by the project, such as COMAN, to support healthy eating initiatives and the use of agrobiodiversity ecotypes.
172. The rating for the project partnerships and stakeholder engagement criteria is highly satisfactory.

3.5.7 Communications, knowledge management and knowledge products

3.5.7.1 Knowledge management and products

Finding 45. The project made an important contribution to knowledge management by including a specific component for this objective. This was complemented by consultations with Indigenous Peoples for the recovery and documentation of ancestral knowledge, as well as the exchange of experiences between beneficiaries of the five macroregions.

173. Through the project, documents and publications were generated on the conservation of agrobiodiversity, traditional (ancestral and local) knowledge, innovations, and important practices related to underutilized species and ecotypes. The project met and exceeded the established goal in terms of the required number of publications. In particular, it generated three publications that promote ecotypes: a) Introduction to agrobiodiversity (EMAGUA); b) the Agrobiodiversity conservation guide (Ministry of Environment and Water/FAO); and c) a book titled *The diversity of native maize in Bolivia* (Ministry of Environment and Water/FAO) (Santos et al., 2021). In addition, 13 cookbooks on the use of agrobiodiversity to improve human nutrition were published.
174. In each macroregion, traditional knowledge (ancestral and local) and case studies on agrobiodiversity were systematized. A total of 34 documents were created for dissemination (such as triptychs and posters). Some of these documents will be included in the National Agrobiodiversity Information System. It was observed that it is necessary to standardize the content structure of the documents produced in each macroregion in order to present the knowledge generated in a more organized manner. These documents generated by the project represent an important contribution to expand knowledge about agrobiodiversity and its uses in human nutrition, while also providing the basis to continue with other studies or initiatives.
175. The ecotypes selected by the project are closely linked to the ecosystems of the macroregions – especially the culture of their inhabitants. In this context, the knowledge of peasants and Indigenous Peoples is important for the production, harvesting and post-harvest processes of the ecotypes and their potential food uses. The project compiled this knowledge and generated documents that systematize the various practices in each of the macroregions for each ecotype. These documents became the basis for the planning and organization of intervention actions related to the project. The need to establish a clear

theoretical framework and determine the expected level of knowledge and its descriptive structure in the systematization, in addition to establishing a similar methodology for all cases, became an opportunity for improvement.

176. As mentioned in the section on sustainability, the SNIaGBD, which was generated by the project and is in the piloting process, could be established as a tool. This tool could facilitate knowledge management and communications and enable the flow of information and documents between the stakeholders linked to agrobiodiversity. This will be possible to the extent that the stakeholders play their role in the generation and dissemination of knowledge. More information about the system is provided in the section on effectiveness, particularly Component 1.

3.5.7.2 Communications

Finding 46. The project implemented a communications strategy based on the use of different media with national coverage.

177. The project did not have a communications strategy until 2019. This was due to difficulties at the beginning of project execution, which led to a change in the execution modality. The *Strategic communications and training plan for education on agrobiodiversity and human nutrition* was created to promote, disseminate and raise awareness of the benefits of the integrated and sustainable management of agrobiodiversity to improve the nutrition of families in the five macroregions. The plan included the principles on which it is based (such as plurality and interculturality, citizen participation and social equity), its cross-cutting axes and the communications methods to be used. The latter included interpersonal, group and mass communications. Due to the COVID-19 pandemic, the plan had to be adapted and mass communications became key. The project also generated the 2019 Social Media Strategy and the 2020 National Media Plan. Thus, the project used different mass media such as social networks (Facebook, Twitter and Instagram), television channels and local radio stations to communicate information about the project and raise awareness of the importance of agrobiodiversity. Detailed information on the publications and dissemination materials generated is presented in Appendix 5. Also, by participating in fairs related to agrobiodiversity, it was possible to interact with different audiences and transmit information on the importance of agrobiodiversity in human nutrition once the COVID-19 pandemic conditions allowed. The results of these plans are presented in the section on effectiveness.

178. The rating for the knowledge management criteria is highly satisfactory, and for the communications criteria, it is satisfactory.

3.6 Cross-cutting concerns

3.6.1 Gender

Finding 47. The project included a gender approach in its design and implementation that contributed to closing priority gender gaps. Although this advance is important, it will require greater efforts to consolidate in the future.

179. Although the project design was not based on a gender analysis, it incorporated gender issues through outcomes, outputs or indicators in the results framework to ensure the participation of women in decision-making (for example, Output 1.1.3 includes the participation of women in the selection of ecotypes) and in obtaining project benefits (for example, Output 2.2.2, which is linked to income generation from the commercialization of

agrobiodiversity products). In addition, different roles played by men and women in the conservation and use of agrobiodiversity species were identified in compliance with the FAO gender policy published in 2012. In this regard, it is also important to mention that the GEF approved its gender policy in 2017 after the project had been approved. As a result, it was not possible to incorporate elements of this policy into that phase of the project.

180. During the first years of project implementation, there was no gender strategy to comply with the provisions of the PRODOC. It was the MTR that recommended the design and implementation of this strategy, with the support of specialists from the FAO Regional Office in Latin America and the Caribbean, and the development of related capacities among the project team.

Figure 5. Efrusal Association located in the Trópico macroregion



Source: FAO. 2022. Photo taken by the Evaluation Team. Trópico, Bolivia

181. In response to this recommendation, the FAO Bolivia gender specialist, together with an expert in masculinities, carried out an analysis with four approaches for each macroregion (gender, intersectionality, generational issues, and prior, free and informed consent). Based on this analysis, the gender gaps were identified and prioritized according to the GEF policy. These are presented in Table 5 along with the contribution made by the project to close the gaps.

Table 5. Contribution of the project to closing the prioritized gender gaps

Prioritized gender gaps	Contribution of the project to closing the gap
Equal participation and decision-making	The workshops to validate the ecotypes and local crops that would be used during the project had 148 women participating in them (34 percent).
Equal access to and control of natural resources	The participants in charge of harvesting the resources of the forest and local crops following the management and production plans created with the support of the project were 49 percent women (1 498 out of a total of 3 058 people). In particular, women, together with the men, signed the socialization and validation agreements for the implementation of these plans. In addition, 453 families, of which 38 percent of their members are women, benefited from PGS certification. This adds value to their crops and products for commercialization.
Equal access to socioeconomic benefits and services	The project does not have the results of a second study that will determine a possible increase in beneficiary income. However, according to its records, of the 1 042 people belonging to the 28 productive associations or organizations that participated in the project, 529 are women (50.8 percent), that is, women

	<p>had an equitable participation in the productive ventures. In addition, five of the associations are made up of women only. Also, the interviews showed that the women's associations, including Mujeres Amazonia, SOS Mujer, Agroecological Entrepreneurs of Wild Fruits of San Antonio de Lomerío (EFRUSSAL) and the Achachairú Association of Women Processors, have obtained additional income from the sale of their products to the municipal government and their participation in fairs or special events. They have also received some kind of equipment. However, the income received has not been constant and, in the case of the Achachairú Association of Women Processors, the income and equipment obtained represents only a token amount.</p>
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Source: Elaborated by the Evaluation Team.

182. An intensive monitoring of project activities was carried out with statistics disaggregated by gender that greatly facilitated this analysis.
183. This project contribution represents an important advance towards gender equality in the conservation and use of agrobiodiversity. One of the interviewees said: "Being able to earn income is something new for Guarani women." This progress should continue and be strengthened in order to ensure that women's activities are more diversified in productive initiatives and not limited to cooking. It is also necessary to expand and strengthen awareness and training on gender equality among productive associations. In fact, most of the women commented that they had not received any training in this area. In this regard, the project team reported that there was not enough time or resources to carry out mass training exercises, but they agreed that progress has been made and that more work needs to be done in this area.
184. The rating for the gender issue is satisfactory.

3.6.2 Minority groups, including Indigenous Peoples, disadvantaged people, vulnerable people, people with disabilities, and youth

Finding 48. The indigenous communities actively participated in the project and were consulted in an appropriate manner. Their customs, traditions and norms were respected at all times.

185. The project consulted the indigenous governments (the Chuquisaca Captaincy Council and the Kaaguasu Captaincy of the Kereimba Iyambae territory in the Chaco macroregion) and all beneficiaries who identified themselves as indigenous to understand their priorities and needs and to not disregard their traditions, customs or rules. This was done according to the documentation review and interviews with these beneficiaries.
186. The project team relied on the FAO Policy on Indigenous and Tribal Peoples for consultation. The coordinator of each macroregion defined the specific strategy to guide the work with these communities. This was done in accordance with their processes and ways of working since the principle of free, prior and informed consent guidelines were not yet in force.
187. In this regard, the project activities were agreed upon and validated by the indigenous communities that also provided support throughout project execution. As part of the project's essential activities, the recovery of indigenous knowledge and practices related to crops, forest products and traditional foods was highlighted through various publications. Indeed, this is a cultural benefit generated by the project. One interviewee said: "We want to remember our ancestors through our food." The project also had an effect on the women

of the Guaraní community of the Chaco macroregion, where the majority of the members in the Amandiá Community Economic Organization are indigenous women.

188. The rating for this topic is highly satisfactory.

3.6.3 Environmental and social safeguards

Finding 49. The project was not rated based on its level of environmental and social risk because it had been formulated before the Environmental Impact Assessment was implemented. The monitoring of the safeguards was provided through the PIRs, but these reports lacked formality.

Finding 50. Given the type of actions implemented by the project, no adverse collateral environmental or social effects were identified. However, it is necessary to strengthen some management plans prepared by the project to prevent environmental risk in the use of forests.

189. Since the project was conceptualized and formulated between 2011 and 2012,²⁵ it did not include the Environmental Impact Assessment as indicated in the *Guidelines for FAO field projects* (FAO, 2012),²⁶ which requested the rating of projects based on their potential impacts on the environment and people. As a result, the project was not categorized according to its level of risk and the PRODOC did not include the Environmental Impact Assessment.

190. The monitoring of safeguards was provided through the PIR reports. However, it is important to mention the reporting problems that were identified in this regard since the situation described in the previous paragraph was not explained in any PIR. The first PIR incorrectly reported that the socioenvironmental risk is low because the project did not involve working with indigenous communities. The following PIRs still assessed a low risk but with a different justification, that is, that the project promotes *in situ* conservation and sustainable use while aiming to not affect the local ecosystems. However, in the 2021 PIR, the risk level was changed to medium without giving a justification for the risk change, and risks reported in the PRODOC were included as general project risks. In this regard, a lack of formality was identified in the reporting of this aspect in the PIRs.

191. It is important to note that the project's environmental objective was the conservation and sustainable use of agrobiodiversity species. For this reason, the project's actions had the objective of generating an environmental benefit. The actions did not generate any collateral adverse effects. This was corroborated in the interviews and through direct observation during the evaluation mission. However, as indicated in the section on environmental sustainability, there is a potential environmental risk derived from some indications that were included in some management plans. These indications promote increasing the number of forest species with commercial value without including thresholds that allow the conservation of ecosystem functionality.

192. The rating for the topic of environmental and social safeguards is moderately satisfactory.

²⁵ The project identification format was presented in 2011, and the PRODOC preparation phase ended at the end of 2012. The project was approved for execution in 2014.

²⁶ These guidelines were replaced by the Guide for Environmental and Social Management published by FAO in 2015.

4. Conclusions and recommendations

4.1 Conclusions

Conclusion 1. The project is aligned with the policies and programmes of the Bolivian Government, FAO's priorities and strategies at the national, regional and global levels, and with Objective 2 of the biodiversity focal area of GEF Cycle 5.

193. The design and results of the project are aligned with the policies of food sovereignty and the protection and sustainable use of agrobiodiversity of the Bolivian Government. They are also aligned with FAO's priorities and strategies at the national, regional and global levels in terms of food diversification, promotion, and access to healthy eating and improved nutrition. In addition, the project contributes to achieving Objective 2 of the biodiversity focal area of GEF Cycle 5, which focuses on promoting the integration of conservation with the sustainable use of biodiversity.

Conclusion 2. The project contributed significantly to *in situ* conservation of agrobiodiversity and its sustainable use. This enabled greater opportunities for food security in the peasant and indigenous communities affected by the project.

194. The project incorporated agrobiodiversity into policies that promote healthy eating. This was mainly done at the municipal level. In addition, it generated tools (management and production plans) and capacities that contribute to *in situ* conservation of agrobiodiversity. It also added value to products, thereby promoting commercialization.

Conclusion 3. The project began with the pre-OPIM execution modality (through operational partners). This was ineffective, so it was replaced by the DEX modality managed by FAO. This was highly effective, despite limiting active involvement on behalf of the governmental partner.

195. The operating partner's complex administrative processes were the main factor affecting the project's level of achievement under the pre-OPIM execution. For its part, the DEX modality under FAO management was highly effective due to results-based management, strategic coordination and effective adaptive measures. As a whole, these facilitated an outstanding level of project achievement. However, this modality limited a more active involvement on behalf of the governmental partner and potential synergies with its other projects.

Conclusion 4. Although the project was successful in generating interinstitutional coordination at the local level, it was difficult to achieve at the national level, mainly with the Ministry of Rural Development and Land.

196. The project expected a high level of participation from the Ministry of Rural Development and Land but did not give it a strategic role. During the execution of the project, the ministry's participation was punctual with targeted benefits. However, these benefits were smaller than expected based on the interinstitutional coordination established in the PRODOC.

Conclusion 5. The project had a high level of ownership of its results and generated capacities at different levels. However, some institutional and environmental risks were identified that need to be mitigated to ensure the sustainability of project results.

197. There was a high level of ownership by government authorities and beneficiaries of the project results and initiatives to ensure their continuity. However, progress was not homogenous among the participating associations. This means that it is necessary to continue providing support to ensure sustainability of the achievements. The need to strengthen interinstitutional coordination (including monitoring and training for INLASA) and environmental sustainability was also identified. There is a need to mitigate an environmental risk linked to the possible reintroduction of wild species of commercial value without protection thresholds for forests.

Conclusion 6. Despite the fact that only 63 percent of the committed co-financing materialized (USD 8.9 million), the project's level of achievement was not affected. This was partly due to additional co-financing.

198. The project received an in-kind contribution of USD 8.9 million, as well as additional co-financing totalling USD 1 335 867. However, the level of co-financing could increase if activities of the Ministry of Environment and Water are considered which, according to information from the ministry, would be linked to agrobiodiversity.

Conclusion 7. The identification of more key stakeholders in addition to those in the PRODOC and the collaboration and participation mechanisms implemented by the project were successful since they contributed significantly to the project's achievements and additional co-financing.

199. During the direct execution of the project, broad collaboration with academia, the productive sector, civil society organizations and local governments was promoted. In addition, successful consultation and participation mechanisms were implemented. This facilitated additional co-financing and contributed to the achieved project results.

Conclusion 8. The project has made an important contribution to knowledge management on agrobiodiversity by incorporating a specific component related to this aspect. It included the creation of an information system, as well as the recovery and documentation of ancestral knowledge.

200. The SNIAgBD was generated, as well as publications on the conservation of agrobiodiversity, traditional knowledge (ancestral and local) and important innovations and practices regarding underutilized species and ecotypes. Consultations with indigenous communities were carried out to recover indigenous knowledge and promote an exchange of experiences among the beneficiaries in the project areas.

Conclusion 9. The project included a gender approach in its design and implementation to close priority gender gaps. This advance is significant, but greater efforts are needed to consolidate future progress.

201. After the MTR, the project carried out and implemented a plan to incorporate the gender approach. This aimed to close gender gaps related to issues of participation and decision-making, access to and control of natural resources, and access to socioeconomic benefits. Areas that require strengthening were identified, such as diversification among women's activities so that they are not limited to cooking. Training on gender roles also needs strengthening.

Conclusion 10. Indigenous communities were consulted in an appropriate manner. Their customs, traditions and rules were respected. These communities, including women, participated actively in

the project. Indigenous knowledge and practices were also recovered during project implementation.

202. The project carried out the necessary consultations and agreements with the indigenous communities under the FAO Policy on Indigenous and Tribal Peoples. The interviewed community members indicated that their customs, traditions and rules were respected at all times, and that they benefited from the project. It is also important to highlight the participation of indigenous women in productive enterprises and the recovery of ancestral knowledge and practices.

Conclusion 11. No adverse social or environmental effects were identified during project execution. However, there is a potential environmental risk in some management plans that were created by the project. This will have to be addressed going forward.

203. During project execution, environmental and social safeguards were adequately implemented. No adverse environmental or social effect was observed. Given the nature of the project, environmental benefits were generated. However, there is a potential environmental risk in some of the management plans that needs to be addressed to ensure the functionality of the forests where agrobiodiversity species are collected.

4.2 Recommendations

Recommendation 1. For the Ministry of Development Planning and FAO. Considering the overlapping agrobiodiversity responsibilities of the Ministry of Environment and Water, the Ministry of Rural Development and Land, the Ministry of Health, and the Ministry of Productive Development and Plural Economy, as well as the benefits achieved by the project and the existence of high-level interinstitutional coordination structures, it is suggested that the government develop and reactivate mechanisms to coordinate initiatives and projects on agrobiodiversity by different government institutions. Here, FAO can play a mediating role.

Recommendation 2. For the Ministry of Environment and Water and FAO. Given the synergies that the National Agrobiodiversity Programme, once approved, could trigger with other ministries and the advantages generated by the optimization of resources, the proposal of the National Agrobiodiversity Programme should be strengthened by including other advances in the subject in its analysis. In particular, it should indicate which actions require the participation of other ministries and their technical areas, and the coordination and collaboration mechanisms to be used. In addition, a consumer awareness raising campaign should be suggested in the proposal.

Recommendation 3. For the Ministry of Environment and Water and FAO. Although the management plans created include measures for the conservation and sustainable use of wild species, there are some – such as the management plans for Charagua Norte, Ibasiriri, Sinai, San Crucito and Machareti – which indicate the production of seedlings in nurseries and the reintroduction of wild species of commercial value, without specifying their scope. This represents an environmental risk that could affect the ecological balance of forests. Therefore, it is recommended to review and strengthen these management plans through a landscape approach. This would balance economically viable species in the ecosystem with other native species that are of no commercial interest but are important for the proper functioning of the ecosystem.

Recommendation 4. For the Ministry of Environment and Water and FAO. The PRODOC recognizes that the project is linked to several areas of responsibility under the Ministry of Rural Development and Land. The ministry was given important tasks and it was a member of the steering committee. However, it was not assigned a specific position in the project or considered

a co-financer. At the start of execution, the Ministry of Rural Development and Land decided not to participate in the steering committee or supervise the project activities for which it was co-responsible. This prevented the expected synergies with the Ministry of Environment and Water from being generated. Therefore, for similar projects, a strategic role should be given to ministries that have important competencies related to the project results (such as executing and co-financing partner) so that they take greater responsibility for the success of the project and benefit equally from its results.

Recommendation 5. For the Ministry of Environment and Water and FAO. Since the evaluation mission identified that some projects and actions of the Ministry of Environment and Water may not have been accounted for in the co-financing reported by the project, a meeting between the Ministry of Environment and Water and FAO should be arranged to review the projects and actions that the ministry is carrying out and that also contribute to the conservation and sustainable use of agrobiodiversity.

Recommendation 6. For the Ministry of Environment and Water and FAO. In order to contribute to the sustainability of the achieved project results, it is suggested that the initiatives in progress or to be implemented in the future be prioritized as follows:

- i. Ensure that all food products generated within the project framework have food safety and ecological certifications, and that the producer associations have formal legal status. In addition, an awareness raising campaign for the consumption of healthy food products should be designed and implemented in local communities.
- ii. Continue with the INLASA training process. Complement the analysis of the nutritional composition of foods carried out within the framework of the project in order to advance the fulfilment of the INFOODS requirements.

Recommendation 7. For the Ministry of Environment and Water and FAO. Continue providing associations and organizations with courses on gender equality and promote innovation in ventures where women can diversify their participation. These efforts aim to advance a gender inclusive approach in existing productive enterprises, as well as those generated through the National Agrobiodiversity Programme and other initiatives, and avoids perpetuating the traditional role of women.

4.3 Lessons learned

4.3.1 Good practices

4.3.1.1 Co-financing

204. a.1. The coordination that took place between academia, the private sector, NGOs and the government to support associations and organizations to meet their different needs, through various programmes and initiatives, contributed significantly to achieving the objectives of the project and obtaining additional co-financing.
205. a.2. The identification of synergies between this project and other FAO projects and initiatives, as well as the coordination between executing teams to carry out joint actions, helped to increase FAO co-financing significantly and reduce the impact of budgetary challenges.

4.3.1.2 Gender equality

206. b.1. The project achieved the effective participation of women, including indigenous women, in productive enterprises. Although the women worked mainly as cooks, since this

role gave them job security due to their knowledge and experience, a next step to advance gender equality is to promote the diversification of the roles of women in other areas.

4.3.2 Lessons learned

4.3.2.1 Project management

Lesson a1. Steering and technical committees are useful for project governance, both under the DEX modality and through an operating partner. However, in both modalities, the project underestimated their importance. In fact, these committees could be considered even more important under the DEX modality since they constitute the main spaces for coordination and interaction with government counterparts through which learning can be generated and their capacities strengthened.

Lesson a2. The change of two LTOs during the design and execution of the project without an adequate transfer of relevant project information between them generated confusion in the reporting of environmental and social safeguards in the PIRs.

4.3.2.2 Project design, evaluation and planning

Lesson b1. The design of the results framework was complex. It lacked a description of indicators and the inclusion of a considerable number of targets and subtargets for some outcomes and outputs. This resulted in an equally complex monitoring system and created difficulties for the Evaluation Team to analyse the project's level of achievement. It is important that the project results framework complies with the concepts and structure of a logical framework to ensure its horizontal logic and the inclusion of specific, measurable, achievable and relevant indicators for the project's duration. In addition, and without detracting from the project's achievements, it is important to note the scale by which some of the project goals were exceeded. This experience can be used to improve the design of similar project goals.

4.3.2.3 Co-financing

Lesson c1. Although a project executing team can support or advise the co-financing partners in determining the amount of their co-financing, it is important that the estimated amounts are reviewed together to ensure a correct estimate. In the interviews, it was indicated that the Ministry of Environment and Water may have other projects related to agrobiodiversity, which could contribute to the project and its co-financing.

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Appendix 1. People interviewed

No.	Last name	First name	Institution/organization	Position
Amazonia macroregion				
1	Alencar	Regis German Richter	Pando Decentralized Autonomous Government	Governor
2	Aliaga	Maria Claudia	Riberalta Municipal Autonomous Government	Consultant
3	Álvarez	Nancy Acuña	Amazon University of Pando	Dean of the faculty of biological and natural sciences
4	Álvarez	Virginia Justiniano	Agricultural Association of Amazonian Outputs of Majo and Acai del Buen Retiro	Recording secretary
5	Antezana	Marco Abasto	Amazon University of Pando	Dean of the faculty of environmental engineering
6	Arteaga	Maria Teresa	SOS Mujer	President
7	Avaroma	Javier Pinto	Association of Harvesters, Producers and Transformers of Abuna Fruits/Federation of Açai and Amazon Fruits of the Department of Pando	President and Vice President
8	Barriga	Nancy Espíritu	FAO Bolivia	Project specialist in nutrition
9	Batte	Rosa Parada	Forestry Association of Agricultural Outputs of the Jericó Community	Member
10	Cardozo	Deyba Gloria Tolava	FAO Bolivia	Project technician (Specialist in transformation and commercialization)
11	Castedo	Joel Huari	ARPEAE	Treasury secretary
12	Chao	Efecio Shico	Forestry Association of Agricultural Outputs of the Jericó Community	Member
13	Chao	Franklin Shico	Forestry Association of Agricultural Outputs of the Jericó Community	President
14	Cortez	Irma	Decentralized Public Institution for Food Security/Ministry of Rural Development and Land	Departmental manager of the cocoa project
15	Cruz	Lucel Vanesa Quispe	Women for the Amazon	Member
16	da Silva	Marilice	Women for the Amazon	Member's daughter
17	do Santos	Andrea Sousa	Trinchera Association of Producers and Collectors of Amazonian Fruits	Member
18	Fernández	Misael Campos	Trinchera Association of Producers and Collectors of Amazonian Fruits/Federation of Açai and Amazonian Fruits of the Department of Pando	President of both organizations
19	Garcia	Marisol	Riberalta Municipal Autonomous Government	Advisor to the mayor

No.	Last name	First name	Institution/organization	Position
20	Gaur	Alfredo	Association of Producers and Collectors of Amazonian Exotic Fruits	President
21	Guari	Regina Macuapa	Association of Producers and Collectors of Amazonian Exotic Fruits	Member and fruit processing worker
22	Hauri	Ana Cristina	Association of Producers and Collectors of Amazonian Exotic Fruits	Member
23	Hurtado	Cristina	Women for the Amazon	Member
24	Julio	Kenedy	Association of Amazonian Fruit Collectors and Outlets Trinchera	Member
25	Lirio		Trinchera of Producers and Collectors of Amazonian Fruits	Member
26	Llanos	Erika	Amazon University of Pando	Head of the biology programme
27	Loayza	Carolina	SOS Mujer	Vice President
28	López	Yordy Leverenz	Autonomous Municipal Government Puerto Rico	Mayor
29	Maturana	Jasmina Jahnet	Women for the Amazon	Member
30	Melena	Ana Lucía Reis	Autonomous Municipal Government Cobija	Mayor
31	Molina	Disere	SOS Mujer	Member
32	Montero	José Antonio Chao	Comprehensive Forestry Association of Agricultural Outputs of the Jericó Community	Member
33	Montero	Juanito Chao	Comprehensive Forestry Association of Agricultural Outputs of the Jericó Community	Member
34	Morales	Roberto Menchaca	FAO Bolivia	Amazonia coordinator
35	Peñaranda	Maritza	Women for the Amazon	President
36	Poma	Gastón	Riberalta Municipal Autonomous Government	Environment and natural resources professional of the municipal council
37	Riveros	Elizabeth Mayta	Decentralized Public Institution "Food Sovereignty"/Ministry of Rural Development and Land	Technician of the Amazon fruits project
38	Valdez	Marianela	SOS Mujer	Member
39	Villalta	Salvador	Decentralized Public Institution "Food Sovereignty"/Ministry of Rural Development and Land	Technician of the Amazon fruits project
40	Villar	Isabel	Women for the Amazon	Member
Altiplano macroregion				
42	Aima	Maria Estela	Municipal Autonomous Government Toledo	Mayor
43	Aro	Hilarion	CHAUANI Technological Institute	Student and network of promoters

No.	Last name	First name	Institution/organization	Position
44	Cáceres	Danitza Alvares	Decentralized Autonomous Government Oruro	Food security technician, Secretary of social development and food security
45	Callegas	Wilfor Villegas	Decentralized Autonomous Government Oruro	Head of the Departmental Council for Food and Nutrition (CODAN), Oruro
46	Callizaya	Benita	Quiascapa Association of Outputs	Member
47	Callizaya	Eduardo Quispe	Quiascapa Community	Recording secretary
48	Callizaya	Macla	Quiascapa Association of Outputs	Member
49	Callizaya	Porfidio	Quiascapa Community	Treasury secretary
50	Capa	Mariela	Toledo Sugarcane Association	Member
51	Cayoja	Rafael Chambi	Toledo Sugarcane Association	President
52	Challapa	Edson	National Service of Agricultural Health and Food Safety	Department head, Oruro
53	Chambi	Samuel Ayala	Toledo Sugarcane Association	Member
54	Choque	Danni	CHAUANI Technological Institute	Student and network of promoters
55	Choque	Eustaquia	Toledo Sugarcane Association	Member
56	Choquetijlla	Alex Mallku	INIAF Oruro	Seed manager
57	Cordova	Juan Carlos Cayo	National Service of Agricultural Health and Food Safety	Animal health manager
58	Cordova	Juan Carlos Cayo	National Service of Agricultural Health and Food Safety	Support for organic production and good agricultural practices
59	Equize	Florencio Callizaya	Toledo Sugarcane Association	Member
60	Fernandez	Nestor	FAO Bolivia	Altiplano coordinator
61	Guaqui	Marina	Quiascapa Association of Producers	Member
62	Hilari	Edwin	Autonomous Municipal Government Puerto Mayor Carabuco	Mayor
63	Hilari	Roberto	Toledo Sugarcane Association	Member
64	Huanaco	Delfina	Toledo Sugarcane Association	Member
65	Huanca	Ruth Anai	Toledo Sugarcane Association	Member
66	Ibarra	Lucia Uño	Toledo Sugarcane Association	Member
67	Iturralde	Milenka	Faculty of Agronomy, Degree Programme in Engineering of Agricultural Production and Marketing, Universidad Mayor de San Andrés	Research fellow

No.	Last name	First name	Institution/organization	Position
68	Justiniano		PGS, Toledo	Legal representative
69	Linares	Carla	Technical University of Oruro	Professor of food engineering and chemistry
70	Mamani	Franklin Quispe	CHAUANI Technological Institute	Student and network of promoters
71	Mamani	Virginia	Municipal Autonomous Government Toledo	Councillor
72	Moya	Isabel Alcon	Toledo Sugarcane Association	Member
73	Oblitas	Rita Ticona	Quiascapa Association of Producers	Member
74	Osmar	Eddy	CHAUANI Technological Institute	Student and network of promoters
75	Paco	Maxima	Toledo Sugarcane Association	Treasury secretary
76	Pacosillo	Teodora	Quiascapa Association of Producers	Vice President
77	Quispe	Adela Quispe	Quiascapa Association of Producers	Member
78	Quispe	Harry Eduardo	PGS, Toledo	PGS evaluator
79	Quispe	José Luis Colque	Toledo Sugarcane Association	Secretary
80	Quispe	Juan Pacosillo	Quiascapa Community	General secretary
81	Quispe	Moisés Aro	CHAUANI Technological Institute	Student and network of promoters
82	Ramos	Pedro Mamani	Quiascapa Association of Producers	President
83	Reyes	Jaime	CHAUANI Technological Institute	Director
84	Romero	Marcos	Autonomous Municipal Government Puerto Mayor Carabuco	Municipal coordinator
85	Siñani	Roxana Condori	CHAUANI Technological Institute	Student and network of promoters
86	Taboada	Cristal	Faculty of Agronomy, Degree Programme in Engineering of Agricultural Production and Marketing, Universidad Mayor de San Andrés	Professor and coordinator of the tarwi project
87	Terán	Vladimir Saavedra	Technical University of Oruro	Professor and former Vice Dean of the faculty of agricultural sciences
88	Ticona	Marco Antonio	Quiascapa Association of Producers	Member
89	Ticona	Willy Carlos	Autonomous Municipal Government Puerto Mayor Carabuco	Councillor
90	Tinaya	Luciano	Autonomous Municipal Government Puerto Mayor Carabuco	Municipal secretary
91	Vincenti	Elizabeth	Toledo Sugarcane Association	Member
Valles macroregion				

No.	Last name	First name	Institution/organization	Position
92	Álvarez	Juan Pablo	Monteagudo Agroindustrial Higher Technological Institute	Director of research and extension of the faculty of agricultural sciences
93	Aquino	Gumercina	Ecological and Productive Association of Palqui	Member
94	Carrillo	Carlos	Presto Autonomous Municipal Government	Director of productive development of the municipality
95	Choque	Avelino	Ecological and Productive Association of Palqui	Member
96	Eizaguirre	Wilfredo	Cotagaita Municipal Autonomous Government	District technician
97	Fernández	Agapo Ilapaya	Presto Autonomous Municipal Government	Councillor
98	Flores	Marcelino	National Service of Protected Areas El Palmar	Park ranger
99	Heredia	Mariaeugenia	Ecological and Productive Association of Palqui	Member
100	Huaman	Francisco	Autonomous Municipal Government Presto	Councillor
101	Mamani	Bernardina	Autonomous Municipal Government Presto	Councillor
102	Nina	Raúl	Autonomous University Tomas Frias	Professor of the faculty of agricultural and livestock sciences
103	Paita	David	Cotagaita Municipal Autonomous Government	President of the municipal council
104	Pérez	Ismael	Radio Loyola Cultural Action Foundation	Marketing and production specialist
105	Pucho	Chaudio	Autonomous Municipal Government Presto	President of the municipal council
106	Quiroga	Lesli Rios	Cotagaita Municipal Autonomous Government	Environment specialist
107	Reyes	Eleuterio	National Service of Protected Areas El Palmar	Park ranger
108	Reynoso	Josefina	Ecological and Productive Association of Palqui	Member
109	Romero	Olvis	Cotagaita Municipal Autonomous Government	Agriculture specialist
110	Salazar	David Torres	Monteagudo Agroindustrial Higher Technological Institute	Dean of the faculty of agricultural sciences
111	Segarra	Benigno	Ecological and Productive Association of Palqui	Member
112	Serrano	Martha	Monteagudo Agroindustrial Higher Technological Institute	Director of the Institute of Agroecology and Food Safety
113	Tejerina	Yobana	Ecological and Productive Association of Palqui	Member
114	Uyuquipa	Dionisa Mamani	Radio Loyola Cultural Action Foundation	Journalist
115	Vásquez	Alejandra	Chuquisaca Decentralized Autonomous Government	CODAN manager

No.	Last name	First name	Institution/organization	Position
116	Villafani	Ricardo	Monteagudo Agroindustrial Higher Technological Institute	Researcher, BIORENA
117	Vivian		Presto Autonomous Municipal Government	Municipal nutritionist
118	Zurita	Nicola	Presto Autonomous Municipal Government	Councillor
119	Seis productores		Association of Processors El Palmar	Members
Chaco macroregion				
120	Aguilar	Elizabeth	Technological Institute of Monteagudo	Student
121	Arana	Francisca Ferreira	Caña Díaz, Guarani Indigenous Community	Member
122	Arancibia	Marianela	Amandiya	Commercialization specialist
123	Arriaga	Alejandro	Peasant Research and Promotion Centre	Technician
124	Barrientos	Bernabé	Amandiya	Head of production
125	Calderón	Teresa	Monteagudo Agroindustrial Higher Technological Institute	PhD student
126	Carvajal	Adhemar	Monteagudo Municipal Autonomous Government	Mayor
127	Carvajal	Josefa	Tentami Group, Indigenous Community	Member
128	Cardozo	Seferina	Tentami Group, Indigenous Community	Member
129	Carlury	Reyna	Tentami Group, Indigenous Community	Member
130	Ceri	Jacinto	Autonomous Indigenous Native Peasant Government Kereimba Iyaambae	Communication manager
131	Chavez	Hilda	Tentami Group, Indigenous Community	Women's group member
132	Chavez	Ivana	Tentami Group, Indigenous Community	First captain, Treasurer
133	Claudia	Rufina	Autonomous Indigenous Peasant Government (GAIOC) Machareti	Captain, Machareti
134	Coca	Natividad	Tentami Group, Indigenous Community	Women's group president
135	Cuitira	Beto	Institute for Rural Development of South America	Manager
136	Feliza		GAIOC Charagua Norte	Director
137	Ferreira	Vicente	Amandiya	Representative
138	Flores	Ángela	Council of Guarani Captains of Chuquisaca, Indigenous Community	Head of production secretariat
139	Flores	Leonida Santos	Machareti Autonomous Native Indigenous Peasant Government	Processing plant manager, Machareti

No.	Last name	First name	Institution/organization	Position
140	Flores	Luis	Council of Guarani Captains of Chuquisaca, Indigenous Community	Captain, Head of land and territory, community justice
141	Flores	María	Amandiya	Representative and production manager
142	Flores	Roxana Palacios	Monteagudo Agroindustrial Higher Technological Institute	Academic coordinator
143	Gonzales	Paula	Monteagudo Municipal Autonomous Government	UNI manager
144	Guzmán	Joel Cayayuri	Charagua Norte Community Economic Organization	Member
145	Guzmán	Marina Uchari	Charagua Norte Community Economic Organization	Member
146	Guzmán	Roger Moreno	GAIOC Charagua Norte	Director
147	Irasavi	Elvira	GAIOC Kereimba Iyaambae	Culture manager
148	López	Clemente	Monteagudo Agroindustrial Higher Technological Institute	PhD student
149	López	José Manuel	GAIOC Macharetí	President
150	Lozano	Agapito	Council of Guarani Captains of Chuquisaca, Indigenous Community	President, Capitan mayor
151	Mani	Rubelia	Tentami Group, Indigenous Community	Member
152	Márquez	Luis Ariel Padilla	Monteagudo Agroindustrial Higher Technological Institute	PhD student
153	Méndez	Amado	GAIOC Charagua North	Director
154	Mendoza	Elena	Tentami Group, Indigenous Community	Member
155	Mendoza	Honorato	GAIOC Charagua North	Director
156	Monterino	Veronica	Tentami Group, Indigenous Community	Member
157	Palenque	Rampon	Council of Guarani Captains of Chuquisaca, Indigenous Community	Manager
158	Paniagua	Alem	Monteagudo Agroindustrial Higher Technological Institute	Professor and Head of the Bañado Research Centre
159	Perez	Cristina	Tentami Group, Indigenous Community	Member
160	Perez	Isabel	Tentami Group, Indigenous Community	Member
161	Plata	Fabiola	FAO Bolivia	Technician
162	Quispe	Agustín	Macharetí Beekeepers Association	President
163	Rivera	Abelarod Yare	Caña Díaz, Guarani Indigenous Community	Member
164	Rivera	Bonifacio	Council of Guarani Captains of Chuquisaca, Indigenous Community	Former captain

No.	Last name	First name	Institution/organization	Position
165	Rivera	Federico Gutiérrez	Caña Díaz, Guarani Indigenous Community	Member
166	Rivera	Jacinta	GAIOC Kereimba Iyaambae	Gender specialist
167	Rivero	Celso Herrera	Charagua Norte Community Economic Organization	Production specialist
168	Rojas	Evelio	GAIOC Kereimba Iyaambae	Land and territory specialist
169	Romero	Fermín	GAIOC Macharetí	Indigenous autonomy specialist
170	Romero	Olver	GAIOC Kereimba Iyaambae	Captain
171	Salas	Roberto Carlos	GAIOC Kereimba Iyaambae	Production specialist
172	Salazar	Juan Slano	GAIOC Charagua North	Director
173	Sánchez	Anibal	Council of Guarani Captains of Chuquisaca, Indigenous Community	Natural resources specialist
174	Segundo	Bartolina	Tentami Group, Indigenous Community	Member
175	Segundo	Ricardo	Tentami Group, Indigenous Community	Production specialist
176	Segundo	Santa	Tentami Group, Indigenous Community	Member
177	Sensano	Eduardo Alberto	Monteagudo Municipal Autonomous Government	Production secretary
178	Seone	Celso	Tentami Group, Indigenous Community	Community captain
179	Solano	Ricardo	Charagua Norte Community Economic Organization	President
180	Suarez	Guillermina	Tentami Group, Indigenous Community	Member
181	Uchari	Luz Marina	Charagua Norte Community Economic Organization	Member
182	Velásquez	Gloria	Monteagudo Municipal Autonomous Government	Municipal council president
183	Villagra	Rolando	Loyola Chaco Cultural Action Foundation	Director
184	Yare	Martin	Caña Díaz, Guarani Indigenous Community	Member
185	Zambrana	Guido	FAO Bolivia	Chaco coordinator
186	Mujer		Technological Institute of Monteagudo	Student
Trópico macroregion				
187	Aguilar	José Saucedo	Las Trancas Community	Community member
188	Chuiel	Jose	Autonomous Municipal Government San Antonio de Lomerio	Hospital logistics manager
189	Chuviru	Ignacia	Agroecological Entrepreneurs of Wild Fruits of San Antonio de Lomerío (EFRUSSAL)	Member
190	Cuasoco	Catalina	Las Trancas Community	Community member
191	Gutierrez	Noel	Porongo Municipal Autonomous Government	Councillor

No.	Last name	First name	Institution/organization	Position
192	Mejía	Javier	FAO Bolivia	Trópico coordinator
193	Pachri	Jesus Urubi	Centre of Indigenous Native Communities of Lomerío	Leader
194	Pacuari	Pedro	Autonomous Municipal Government San Antonio de Lomerio	Medical doctor, Lomerio
195	Padturi	Laida	EFRUSSAL	Member
196	Parapaino	Juan	EFRUSSAL	Member
197	Parapiba	Jose Antonio	Autonomous Municipal Government San Antonio de Lomerio	Cacique
198	Peña	Anacleto	Centre of Indigenous Native Communities of Lomerío	General Cacique
199	Peña	Yenny Tomicha	EFRUSSAL	Member
200	Pimentel	Silvana	Porongo Municipal Autonomous Government	Advisor to the Municipal council president
201	Rodrigues	Marcos	Porongo Municipal Autonomous Government	Technical advisor
202	Salas	Ernesto	Porongo Municipal Autonomous Government	Product development director
203	Salas	Wendy	Porongo Municipal Autonomous Government	Product development technician
204	Soquerech	Flora	EFRUSSAL	Member
205	Sorioco	Rosmery	EFRUSSAL	Member
206	Suarez	Marisable	Porongo Municipal Autonomous Government	Councillor
207	Sumani	Angel	Autonomous Municipal Government San Antonio de Lomerio	Mayor
208	Unzueta	Alejandra	Porongo Municipal Autonomous Government	Municipal council president
209	Vivero	Rosmery	EFRUSSAL	Member
210	Seven women		Sombrefrut	Members
FAO Bolivia				
211	Ametller	Patricia	FAO Bolivia	Gender focal point
212	Fernández	Boris	FAO Bolivia	Project coordinator
213	Gámez	Carlos	FAO Bolivia	Administrative and financial manager
214	Mantilla	Edgar	FAO Bolivia	M&E manager
215	Rocha	Pamela	FAO Bolivia	Agrobiodiversity specialist
216	Rodas	Carol	FAO Bolivia	Programme officer
217	Roubach	Rodrigo	FAO Bolivia	Representative
218	Tapia	Sarezka	FAO Bolivia	Communication manager
FAO Regional Office and Headquarters				
219	González	Hernán	FAO	GEF Funding liaison officer
220	Ortiz	Hivy	FAO	LTO
221	Posas	Ana	FAO	LTO, Agriculture officer

Appendix 2. GEF evaluation criteria rating table

GEF criteria/sub-criteria	Rating	Summary comments
A. STRATEGIC RELEVANCE		
A1. Overall strategic relevance	HS	The project addresses agrobiodiversity. This is highly relevant for food security and biodiversity conservation, and links these aspects to the recovery and revaluation of indigenous knowledge.
A1.1 Alignment with GEF and FAO strategic priorities	S	The project aligns with FAO priorities on food diversification and improved nutrition. It also aligns with the GEF-5 Biodiversity Focal Area, especially the goal of integrating conservation with the sustainable use of biodiversity.
A1.2 Relevance to national, regional and global priorities and beneficiary needs	HS	The project aligns with the policies and strategies of different ministries of the Bolivian Government on the conservation and use of biodiversity and food security. Also, necessary consultations with beneficiaries upon project launch contributed to addressing some of their priority needs.
A1.3 Complementarity with existing interventions	MS	Since the issues addressed by the project are priorities, actions were complemented by existing government interventions, as well as FAO initiatives and projects. However, the synergies generated with the Ministry of Rural Development and Land were limited.
B. EFFECTIVENESS		
B1. Overall assessment of project results	S	The project results met the objectives.
B1.1 Delivery of project outputs	S	The project achieved most of the expected outputs and, in some cases, the goals were significantly exceeded. However, in one case, it was not possible to measure the level of compliance. This is because the final information was not available (increase in income). In another case, the project did not generate the required information.
B1.2 Progress towards outcomes and project objectives	S	Some goals were exceeded. Although the level of compliance could not be determined for some outcomes, the progress observed through the work carried out indicates that the project is on the right track. In addition, there is evidence that the project has contributed to food security and the conservation and use of agrobiodiversity.
- Outcome 1.1	MS	The level of achievement of the goal was 80 percent. More documents were produced than required. However, these documents have not been uploaded to the information system, per the objective.
- Outcome 2.1	HS	The level of achievement of the goal was estimated at 1 214 percent since a greater area was covered under a conservation and sustainable use scheme.
- Outcome 2.2.a	UA	The level of income resulting from the intervention was surveyed to compare it with a baseline level. Its results, though, were not

GEF criteria/sub-criteria	Rating	Summary comments
		available during the data collection phase of the evaluation. During the review of the evaluation report, the project team informed the Evaluation Team that the survey had already been completed and that an average income of USD 316 per year per family had been obtained – exceeding the goal. However, the Evaluation Team has doubts on the methodology used in the initial and final surveys.
- Outcome 2.2.b	HS	The level of achievement of the goal was estimated at 4 231 percent. The number of hectares certified under organic production standards greatly exceeded the goal.
- Outcome 3.1	MS	According to the Evaluation Team's estimate, the project reached 70 percent of the goal for this outcome: 7 points out of 10 were achieved in the Regulatory Framework Section of the GEF tracking tool.
- Outcome 4.1	UA	This outcome focused on reaching at least a 30 percent level of awareness of the importance of agrobiodiversity. However, the project did not include the measurement of this level of awareness. As a result, there is no data to determine the progress towards the goal. During the review of the evaluation report, the project team informed the Evaluation Team about the results of the second KAP survey, which showed an increase in awareness of agrobiodiversity and its importance. However, since the use of additional or different variables was reported in the second KAP and the survey results were not shared with the Evaluation Team, it was difficult to determine if the 30 percent increase in the level of awareness was achieved, as established in the results framework. That is, the Evaluation Team identified an increase in the level of awareness but could not determine the level of the increase.
- Overall rating of progress towards achieving objectives/outcomes	S	Some goals were not 100 percent achieved, and the level of achievement of some outcomes was impossible to determine. In any case, it is important to highlight that certain key goals, such as the total area of land protected under a conservation scheme – which was monitored through the GEF tracking tool – were exceeded.
B1.3 Likelihood of impact	S	The evidence shows that the outcomes achieved have contributed to reactivating and, in some cases, strengthening the supply of traditional fruits and vegetables. This includes their transformation into products with high nutritional value. However, it is necessary to ensure the sustainability of this supply.
C. EFFICIENCY		
C1. Efficiency	MS	Although the efficiency of the project was low during the pre-OPIM implementation phase, it later increased with the change of execution

GEF criteria/sub-criteria	Rating	Summary comments
		modality. This change in modality, the COVID-19 pandemic and sociopolitical problems represented important challenges that were overcome thanks to the implementation of highly effective adaptive measures. As a result, however, the project had to be extended for two and a half years where it then achieved most of the expected products. The interinstitutional coordination with the Ministry of Rural Development and Land occurred in a timely manner to generate important benefits in the field. However, it is considered that the benefits would have been greater if the ministry had been actively involved in the project.
D. SUSTAINABILITY OF PROJECT OUTCOMES		
D1. Overall likelihood of risks to sustainability	ML	The risks identified are mainly institutional and environmental, which can be mitigated through the initiatives proposed in the project closure strategy and through attention to the recommendations of this evaluation.
D1.1 Financial risks	ML	There is a proposal from the National Agrobiodiversity Programme that would ensure the continuity of the project achievements with an estimated budget of USD 11 million. However, the programme has not been authorized by the relevant authority or approved by the funding agency.
D1.2 Sociopolitical risks	ML	A high level of ownership was shown by the project beneficiaries, even though the level of progress was not homogeneous among the participating associations and all expressed important unmet needs. Therefore, it is necessary to continue providing support and strengthening the progress achieved by the project.
D1.3 Institutional and governance risks	MU	There needs to be interinstitutional coordination at the national level between the ministries that influence agrobiodiversity. There is a risk that some actions by certain ministries could undermine the project's achievements.
D1.4 Environmental risks	ML	Management plans were generated with measures that allow for the conservation of agrobiodiversity. However, some of these plans need to be strengthened to mitigate the environmental risk that could affect the functionality of the ecosystems in some of the project intervention areas.
D2. Catalysis and replication	L	The National Agrobiodiversity Plan proposal includes the expansion of the project's coverage to other municipalities, thereby increasing the area of intervention.
E. FACTORS AFFECTING PERFORMANCE		
E1. Project design and readiness	MU	The project presents a vertical logic in its structure. However, the results framework turned out to be complex and ambitious. Considering

GEF criteria/sub-criteria	Rating	Summary comments
		the overlapping competencies of the Ministry of Rural Development and Land with the project actions, the ministry would have been expected to play a more strategic role in its design.
E2. Quality of project implementation	MS	The pre-OPIM implementation phase was ineffective. However, the direct implementation by FAO was very effective, and this contributed significantly to the achievement of the outcomes.
E2.1 Quality of project implementation by FAO (BH, LTO, PTF, etc.)	MS	Project supervision in general terms was adequate. Some management plans that require technical strengthening were identified. In addition, the PIR needs to be reviewed and completed, mainly the section on environmental and social safeguards. There were two changes of LTO, but there was not an adequate transfer of information when the changes took place.
E2.2 Project oversight (project steering committee, project working group, etc.)	MU	The project gave little importance to the steering and technical committees. In some years, no committee meetings were held. According to the PRODOC, these were the main decision-making bodies for the project.
E3. Quality of project execution For decentralized projects: Project Management Unit/BH For OPIM projects: Executing agency	MS	During the pre-OPIM implementation phase, the quality of execution was affected by complex and lengthy procurement processes for goods and services. With the change of modality to direct execution, the quality of execution improved due to strategic coordination, intensive monitoring and results-based management.
E4. Financial management and co-financing	MS	The financial management of the project faced some complications in the pre-OPIM phase due to the executing partner's lack of experience in this type of project. In the direct execution phase, no observations regarding financial management were identified. Of the total co-financing committed, 63 percent was received. However, additional co-financing was obtained and no negative effect from the level of compliance with the co-financing committed was observed.
E5. Project partnerships and stakeholder engagement	HS	The participation and involvement mechanisms of academia, civil society organizations, the private sector and government (mainly at the local level) were highly successful. This contributed to the achievement of outcomes and to obtaining additional co-financing.
E6. Communication, knowledge management and knowledge products	HS	Components 1 and 2 of the project focused on knowledge generation and management. This included the generation of new knowledge and the systematization of existing knowledge in an information system, which is still in the testing phase, and in publications that highlight the knowledge of indigenous communities.
E7. Overall quality of M&E	MS	There is no evidence that any monitoring system was implemented under the pre-OPIM modality. In the DEX phase, a detailed monitoring system was developed to reflect the complexity of the

GEF criteria/sub-criteria	Rating	Summary comments
		results framework. It was also useful in conducting results-based management.
E7.1 M&E design	S	The M&E plan outlined in the PRODOC complies with the GEF requirements.
E7.2 M&E implementation plan (including financial and human resources)	MS	The M&E plan was implemented nearly in full. There was only one technical supervision visit that could not be carried out due, in part, to the COVID-19 pandemic. The project monitoring system reflected the complexity of the results framework, and the reported PIRs showed areas for improvement.
E8. Overall assessment of factors affecting performance	MS	Although each of the factors discussed above showed areas for improvement, these did not have a significant effect on the achievement of project outcomes.
F. CROSS-CUTTING CONCERNS		
F1. Gender and other equity dimensions	S	The project contributed to closing priority gender gaps.
F2. Human rights issues/Indigenous Peoples	S	The project carried out the necessary consultations with the indigenous communities. It respected their traditions, customs and norms at all times.
F3. Environmental and social safeguards	MS	At the time of project formulation, the environmental impact assessment was not requested. However, given the nature of the project, no environmental or social impact was identified or observed as a result of project execution. A potential environmental risk was identified that should be addressed in connection with management plans. The reporting of this section in the PIRs was confusing.
Overall project rating	HS	The project faced important challenges during its execution (execution modality change, the COVID-19 pandemic and sociopolitical problems within the country). These were addressed in a highly effective way through adaptive measures. This allowed the project to achieve the majority of its objectives and expected environmental benefits. In some cases, the goals established in the plan were exceeded.

Appendix 3. Rating scheme

PROJECT RESULTS AND OUTCOMES

Project outcomes are rated based on the extent to which project objectives were achieved. A six-point rating scale is used to assess overall outcomes:

Rating	Description
Highly Satisfactory (HS)	<i>Level of outcomes achieved clearly exceeds expectations and/or there were no shortcomings.</i>
Satisfactory (S)	<i>Level of outcomes achieved was as expected and/or there were no or minor shortcomings.</i>
Moderately Satisfactory (MS)	<i>Level of outcomes achieved more or less as expected and/or there were moderate shortcomings.</i>
Moderately Unsatisfactory (MU)	<i>Level of outcomes achieved somewhat lower than expected and/or there were significant shortcomings.</i>
Unsatisfactory (U)	<i>Level of outcomes achieved substantially lower than expected and/or there were major shortcomings.</i>
Highly Unsatisfactory (HU)	<i>Only a negligible level of outcomes achieved and/or there were severe shortcomings.</i>
Unable to Assess (UA)	<i>The available information does not allow an assessment of the level of outcome achievements.</i>

The results framework of some projects may have been modified during project implementation. In cases where modifications in the project impact, outcomes and outputs have not scaled down their overall scope, the evaluator should assess outcome achievements based on the revised results framework. In instances where the scope of the project objectives and outcomes has been scaled down, the magnitude of and necessity for downscaling is taken into account. Despite the achievement of results per the revised results framework, a lower outcome effectiveness rating may be given where appropriate.

PROJECT IMPLEMENTATION AND EXECUTION

The quality of implementation and execution will be rated separately. Quality of implementation pertains to the role and responsibilities discharged by the GEF agencies that have direct access to GEF resources. Quality of execution pertains to the roles and responsibilities discharged by the country or regional counterparts that received GEF funds from the GEF agencies and executed the funded activities on the ground. The performance will be rated on a six-point scale:

Rating	Description
Highly Satisfactory (HS)	<i>There were no shortcomings and quality of implementation or execution exceeded expectations.</i>
Satisfactory (S)	<i>There were no or minor shortcomings and quality of implementation or execution meets expectations.</i>
Moderately Satisfactory (MS)	<i>There were some shortcomings and quality of implementation or execution more or less meets expectations.</i>
Moderately Unsatisfactory (MU)	<i>There were significant shortcomings and quality of implementation or execution was somewhat lower than expected.</i>
Unsatisfactory (U)	<i>There were major shortcomings and quality of implementation or execution was substantially lower than expected.</i>
Highly Unsatisfactory (HU)	<i>There were severe shortcomings in the quality of implementation or execution.</i>
Unable to Assess (UA)	<i>The available information does not allow an assessment of the quality of implementation or execution.</i>

MONITORING AND EVALUATION

Quality of project M&E will be assessed in terms of:

- i. design
- ii. implementation

SUSTAINABILITY

The sustainability will be assessed by taking into account the risks related to financial, sociopolitical, institutional and environmental sustainability of the project outcomes. The evaluator may also take other risks into account that may affect sustainability. The overall sustainability will be assessed using a four-point scale:

Rating	Description
Likely (L)	<i>There is little or no risk to sustainability.</i>
Moderately Likely (ML)	<i>There are moderate risks to sustainability.</i>
Moderately Unlikely (MU)	<i>There are significant risks to sustainability.</i>
Unlikely (U)	<i>There are severe risks to sustainability.</i>
Unable to Assess (UA)	<i>Unable to assess the expected incidence and magnitude of risks to sustainability.</i>

Appendix 4. GEF co-financing table

Name of co-financer	Co-financer type	Type of co-financing	Co-financing at project start (Amount confirmed at GEF CEO endorsement/approval by the project design team) (in USD)			Materialized co-financing at project mid-term (in USD)		
			In-kind	Cash	Total	In-kind	Cash	Total
General Directorate of Biodiversity and Protected Areas – EMAGUA	National government	In-kind	250 000	0	250 000	302 697	0	302 697
Ministry of Environment and Water	National government	<i>Biocultura</i> project – In-kind	8 528 030	0	8 528 030	787 572	0	787 572
Autonomous Regional Government of Chaco	Regional government	In-kind	3 517 991	0	3 517 991	2 759 300	0	2 759 300
Multilateral agencies	FAO	In-kind	1 379 000	0	1 379 000	3 780 989	0	3 780 989
National Committee for Competitiveness and Productivity of the Quinoa Production Chain	Civil society organizations	In-kind	440 000	0	440 000	0	0	0
CT- CONAN/health	National government	In-kind	-	0	-	22 699	0	22 699
INIAF/Coordination Unit of the National Council of Organic Production/Bolivian Institute of Metrology/Comprehensive Management Natural Area El Palmar/Ministry of Rural Development and Land – IPDSA	National government	In-kind	-	0	-	278 494	0	278 494
Subnational governments – Macroregions	Local government	In-kind	-	0	-	457 738	0	457 738
Universities/academia	Universities and public institutions ^a	In-kind	-	0	-	339 318	0	339 318
NGOs/foundations	NGO ^b	In-kind	-	0	-	102 451	0	102 451
Producer associations/civil society	Council of Guaraní Captains of Chuquisaca	In-kind	-	0	-	135 167	0	135 167
Total			14 115 021	0	14 115 021	8 966 425	0	8 966 425

Notes: ^a Includes the following universities and research centres: CEP Arakuarendami; Chuani ITEC Technical Institute; Huacareta ITSA Higher Technological Institute; Monteagudo Higher Technological Institute ITSM; Amazon University of Pando; Autonomous University of Beni UAB; Tomás Frías Autonomous University; Bolivian Indigenous University; Bolivian Guaraní Indigenous University; Universidad Mayor de San Andrés/Tarwi Project; San Francisco Xavier University USFX Monteagudo; San Francisco Xavier University USFX Sucre; and Oruro Technological University Faculty of Agronomy.

^b The co-financing NGOs were: Centre for Research and Promotion of Smallholder Farmers; SDC/Tarwi Project, Universidad Mayor de San Andrés; Institute for Rural Development of South America Chaco; REVELRY; and Andean-Amazonian Pluricultural

Community for Sustainability/University of Bern.
 Source: Project team. Figures as of 24 June 2022.

GEF contributions by project component and outcome (as of 31 December 2021)

	Total budget in the PRODOC		Total executed	
	%	USD	%	(USD)
Component 1:	15.3	398 145	14.6	380 962 41
Outcome 1.1				
Subtotal				
Component 2:	47.1	1 225 413	41.30	1 073 883.20
Outcome 2.1				429 553.28
Outcome 2.2				644 329.92
Subtotal				
Component 3:	9.2	238 430	9.31	242 297.09
Outcome 3.1				
Subtotal				
Component 4:	11.4	297 090	10.76	279 869.94
Outcome 4.1				
Subtotal				
Component 5:	12.1	315 399	10.92	284 105.05
Outcome 5.1				
Project administration	5	125 523	4.81	125 296.97
TOTAL COST OF THE PROJECT	100	2 600 000	91.69	2 386 514.66

Appendix 5. Results matrix

Component 1: National Information System on Native Agrobiodiversity, the nutritional properties of native species and their climate change resilience

Outcome/output	Baseline	Goal	Progress towards the goal	Evidence	Valuation
<p>Outcome 1.1</p> <p>Increase in the availability of easily accessible data grouped by macroregion for policymakers, consumers and local communities on agrobiodiversity, food consumption and local native crop species resilient to climate change.</p>	<p>No systematized, centralized and easily accessible data available on agrobiodiversity related to food consumption and resilience to climate change.</p>	<p>1 000 new documents prepared and uploaded to the SNIAgBD.</p>	<p>The project compiled 1 239 documents on agrobiodiversity, exceeding the number of documents considered in the goal. However, at the time of the evaluation, the process of uploading the documents to the SNIAgBD was still in progress.</p> <p>Therefore, the goal has not been fully met for this outcome.</p>	<p>The M&E manager of the project showed the Evaluation Team the digital folder with the documents compiled by the project.</p> <p>The Evaluation Team had access to a preliminary version of the SNIAgBD.</p>	<p>The project exceeded the goal of number of documents collected, pending their availability in the National Information System.</p> <p>The total level of compliance with the goal is 80 percent.</p>
<p>Output 1.1.1</p> <p>A SNIAgBD that is easily accessible and available to those in charge of policymaking, consumers and local communities.</p>	<p>Database of wild relatives of crops in the Ministry of Environment and Water.</p> <p>BioCAN Programme in information systems.</p> <p>INIAF database on agrobiodiversity.</p> <p>No existing institutional information system</p>	<p>National information system established and operating.</p> <p>At least 1 000 new documents collected in the fourth year of the project uploaded and entered into the information system.</p>	<p>The project developed a SNIAgBD, which is hosted on the servers of the Ministry of Environment and Water. The programming and coding of the system was carried out in line with the standards of the server and according to the guidelines of the ministry. The system is in the testing phase, with restricted access for some project professionals and the Ministry of Environment and Water. Its final launch with access for the target public of the project is still pending.</p> <p>1 239 documents from public and private institutions, research centres, universities and other cooperation agencies were collected, of which only 54 percent are</p>	<p>The preliminary version of the SNIAgBD features restricted access.</p> <p>A total of 12 institutional agreements were signed to facilitate their current and future contributions to the bibliography and uses of the system (Iboperenda Agricultural Technological Research and Innovation Centre, Monteagudo Agroindustrial Higher Technological Institute,</p>	<p>The goal has two components:</p> <p>a) establishment of the SNIAgBD, whose compliance is 40 percent (the expected contribution of this component to the total goal is 50 percent); and</p> <p>b) document drafting and uploading to the system, which reached 40 percent of the goal (the expected</p>

Outcome/output	Baseline	Goal	Progress towards the goal	Evidence	Valuation
	to share data on agrobiodiversity resources.		available in the national information system, which is still in the testing phase. The target has not been fully met for this output.	Bolivian Guarani Indigenous University, Autonomous Indigenous Native Government Charagua, Mayor, Royal and Pontifical University San Francisco Xavier de Chuquisaca, Technical University of Oruro, Autonomous University Gabriel René Moreno, Amazonian University of Pando, Centre of Indigenous Communities of Concepción, Centre for Peasant Agricultural Promotion, Centre of Indigenous Native Communities of Lomerio).	contribution of this component to the total goal is 50 percent). The total level of compliance with the goal is 80 percent.
Output 1.1.2 Agrobiodiversity food sources evaluated through the use of gender-disaggregated nutrition indicators for biodiversity (a. food composition and b. food consumption).	Nutrition indicators for biodiversity have not been tested in any of the five macroregions. Dietary evaluation surveys show limited use of agrobiodiversity.	Database on the physical-chemical composition of food and nutrition value for 50 prioritized foods (two communities for each macroregion). <i>Ex post</i> report (first quarter 2022) on the increase in consumption of agrobiodiversity food sources (at least 18 percent increase in food consumption) disaggregated by	The project generated tables of physical-chemical composition and nutritional value for 56 ecotypes of agrobiodiversity, or 6 more ecotypes than the goal, which are expected to be included in the database. Regarding the <i>ex post</i> report, this is in the process of being prepared, so it is not yet possible to determine if there was an increase in the consumption of agrobiodiversity foods with the geographical coverage and participation of women indicated in the goal. The progress made in this regard consists of the methodological proposal to determine food consumption in the target populations where the variables for analysis are established. There is also an <i>ex ante</i> study on food consumption carried out in ten communities, which contains the estimated values for the indicators proposed in the methodology.	INLASA report on agrobiodiversity species. Reports from studies on food consumption.	The goal has five components: a) database with information on 50 types of food: 35 percent completed (40 percent is the expected contribution of this component to the total goal); b) <i>Ex post</i> : 7 percent (10 percent is the expected contribution of this component to the total goal); c) an increase of 18 percent in

Outcome/output	Baseline	Goal	Progress towards the goal	Evidence	Valuation
		gender in ten identified communities (two communities per macroregion and with a participation of at least 50 percent women).	<p>In 2017, a study was carried out to determine the use of agrobiodiversity food sources in the macrocoregions of the Altiplano, Amazonia and Chaco, with one community selected as a sample in each macrocoregion where the study focused on the types of food consumed. In 2018, the same study was carried out for the Valle macrocoregion in two communities in the municipality of Torotoro, where the consumption of proteins, carbohydrates and iron was considered.</p> <p>For 2019, there is a baseline report on consumption by food groups. In 2020, a study was carried out on the consumption of agrobiodiversity foods considering the different ecotypes. These two documents consider the five macrocoregions and a total of ten communities.</p> <p>The information generated presents different variables in each study. This makes it more complicated to determine the increase in consumption of agrobiodiversity food products.</p>		<p>agrobiodiversity food consumption: cannot be determined (30 percent is the expected contribution of this component to the total goal);</p> <p>d) Communities covered: 10 percent (10 percent is the expected contribution of this component to the total goal); and</p> <p>e) Participation of women: 10 percent (10 percent is the expected contribution of the component to the total goal).</p> <p>The total level of compliance with the goal is 62 percent.</p>
<p>Output 1.1.3</p> <p>Selection of ten ecotypes of local plants/crops important for food and nutrition security (with a gender-sensitive participatory approach) in each of the</p>	<p>No agrobiodiversity food products have been analysed in relation to their nutritional content, resilience to climate change and threat of genetic erosion, including the 56 food products pre-</p>	<p>At least ten ecotypes of plants/crops identified in each macroregion for cultivation and <i>in situ</i> conservation, based on criteria related to nutrition, climate change resilience and threat of genetic erosion.</p>	<p>The project met and exceeded the goal, working with 56 agrobiodiversity ecotypes, 25 of which are crops and 31 are wild species. In each macroregion, the project focused on at least ten ecotypes. These were identified based on their nutritional value, climate change resilience and threat of genetic erosion.</p> <p>The 56 ecotypes include:</p> <p>25 cultivated crops (tumbo, arracacha, amaranth, colorado bean, cambita bean, sweet potato, wild cocoa, achachairú, peanut, black maize, Creole maize, yellow</p>	<p>Validation documents for the five macroregions (Altiplano, Amazonia, Chaco, Trópico and Valles) with stakeholders from each region.</p> <p>Technical reports for each of the five macroregions (Altiplano, Amazonia, Chaco, Trópico and Valles).</p>	<p>The project met the goal according to the conditions required to identify the ecotypes and their potential for <i>in situ</i> conservation.</p> <p>The total level of compliance with the goal is 112 percent.</p>

Outcome/output	Baseline	Goal	Progress towards the goal	Evidence	Valuation
macroecoregions and analysis of their characteristics in terms of nutritional content, climate change resilience and threat of genetic erosion.	selected during project preparation.		maize, cucurbita squash, cucurbita joco, cumanda, sweet potato, cupuaçu, cultivated cocoa, tarwi, native potatoes, izaño, and varieties and ecotypes of cañahua); and 31 wild species (tamarillo [<i>Solanum betaceum</i>], palqui, Bolivian mountain coconut, gargatea, algarrobo, wild papaya, pachio, pachio monte, giant pachio, ocoro, chirimoya, Chiquitana almond, sahuinto, Bolivian walnut, mistol, guayabilla, guapurú, arrayán, ^a algarrobo, moriche palm, majo, lucuma, cedrillo, Brazil nut, casharana, açai, arazá, sankayu, pasacana, amañoque, and achacana).		
Output 1.1.4 Database developed on the nutritional content of agrobiodiversity, according to international norms and standards (FAO/INFOODS).	Databases of Food Composition in Bolivia INLASA/Ministry of Health, including 41 native wild foods, were validated and published by the Ministry of Health by 2012.	Inclusion of 50 new agrobiodiversity food products in food composition databases based on FAO/INFOODS international standards for biodiversity food composition. The agrobiodiversity food composition database is in operation. It is linked to the agrobiodiversity resource database of the Ministry of Environment and Water and available to the public.	This output is similar to Output 1.1.2 with overlapping goals focused on the nutritional values of the agrobiodiversity ecotypes but with Output 1.1.4 incorporating the standards of FAO/INFOODS. The baseline mentions the existence of a database of food composition in Bolivia. However, according to the interview with INLASA, it was determined that a publication with tables of nutritional values exists, which does not meet the definition of a database. The project generated tables of physical-chemical composition and nutritional value for 56 agrobiodiversity ecotypes, but since there is no database, the second part of the goal (having an operating database linked to the agrobiodiversity resources database of the Ministry of Environment and Water) has not been met. The nutritional value composition data is currently in the standardization phase based on the FAO/INFOODS standards. In addition, according to the interview with the INLASA representative, the data requested by the project for the analysis did not include the data required by FAO/INFOODS. Also, at that time, INLASA was unaware of the purpose or uses of this analysis and assumed they were a routine analysis not necessarily	INLASA report on agrobiodiversity species. Document with methodological proposal according to FAO/INFOODS.	The project generated the required information, but a database still does not exist to organize the data. Total level of compliance with the goal is 80 percent.

Outcome/output	Baseline	Goal	Progress towards the goal	Evidence	Valuation
			meant to feed a database of the magnitude envisioned by the project. According to INLASA, it is possible to carry out some additional analysis to comply with the required standards, but not for all ecotypes.		

Note: ^a Arrayán refers to arrayán negro (*Myrcianthes rhopaloides*).

Component 2: Ensure support for *in situ* conservation of agrobiodiversity by linking selected ecotypes to markets

Outcome/output	Baseline	Goal	Progress towards the goal	Evidence	Valuation
<p>Outcome 2.1</p> <p><i>In situ</i> conservation of selected local ecotypes important for nutrition and food security was implemented in 50 communities, covering 6 000 ha in five macroecoregions. An additional 125 communities, covering 15 000 ha, will benefit indirectly after project completion through the expansion of agrobiodiversity conservation.</p>	<p>There are only fragmented and non-systematized experiences of <i>in situ</i> conservation of agrobiodiversity in the sites selected for the project.</p>	<p><i>In situ</i> conservation of selected species was implemented on 6 000 ha with an additional 15 000 ha identified for replication of the agrobiodiversity management plans and the relevant ministries committed to their implementation.</p>	<p>The project exceeded the first goal covering an area of 66 065 ha with 11 species in use. Over 90 percent represents areas with management plans for wild species, while 10 percent corresponds to cultivated ecotypes (for example, potato, cañahua, tarwi, maize and cumanda).</p> <p>The second goal was also exceeded. In fact, the National Agrobiodiversity Programme, prepared with the project, plans to establish a total area of 199 418 ha under integrated and sustainable agrobiodiversity management.</p>	<p>Documentation of management and production plans.</p> <p>Preliminary document of the National Agrobiodiversity Programme.</p>	<p>Considering the area covered by the project, it reached 550 percent of the first goal (50 percent is the expected contribution of the component to the total goal) and 664.7 percent of the second goal, corresponding to the area established under the National Agrobiodiversity Programme (50 percent is the expected contribution of the component to the total goal).</p> <p>The total level of compliance with the goal is 1 214 percent.</p>
<p>Output 2.1.1</p> <p>Gender-sensitive evaluation of local agrobiodiversity conservation methodologies and practices, as well as classification of cultivated ecotypes/varieties, wild</p>	<p>No data is available on the methodologies and practices of conservation of agrobiodiversity in the sites selected for the project.</p>	<p>Full assessment of <i>in situ</i> conservation practices at the five project sites in the macroecoregions.</p> <p>Classification of at least 100 cultivated varieties/ecotypes, wild species and native seeds, including methodologies</p>	<p>The project generated the following reports: three diagnostic reports on the distribution of species; four local knowledge reports (Altiplano, Amazonia, Valles and Trópico) and seven local knowledge studies on the Guaraní people (Chaco). These reports contributed to the</p>	<p>Local knowledge reports, descriptions and catalogues.</p>	<p>Due to the lack of a quantifiable target in the first goal (50 percent contribution), it can be asserted that the goal was fully met: 50 percent.</p> <p>The project reached 112.5 percent of the</p>

Outcome/output	Baseline	Goal	Progress towards the goal	Evidence	Valuation
<p>species and native seeds, and related traditional knowledge in five macroecoregions.</p>		<p>and practices based on gender-sensitive data.</p>	<p>evaluation of local <i>in situ</i> conservation practices of agrobiodiversity ecotypes. The project achieved the goal.</p> <p>In 2021, the project published a book on maize cultivation in the country (<i>Libro nacional del maíz</i> [The national maize book]), which provides information for the conservation of native maize species.</p> <p>The project exceeded the goal of 100 varieties of ecotypes cultivated and classified. The project identified 225 varieties of ecotypes of agrobiodiversity species (Altiplano 30 percent, Amazonia 5 percent, Chaco 45 percent, Trópico 5 percent and Valles 15 percent).</p> <p>The project achieved 41 descriptions of species: Altiplano with native maize, potato, cañahua, tarwi, Amazonia with arazá, açai, cocoa, cacharana, Brazil nut, cedrillo, cupoazú, lucuma, majo, moriche palm, Chaco with native maize, cumanda, peanut, sweet potato, cucurbitas, Bolivian walnut, mistol, sahuinto, arrayán negro, algarrobo, guayabilla, guapurú, Trópico with achachairú,</p>		<p>second goal (50 percent is the expected contribution of the component to the total goal).</p> <p>The total level of compliance with the goal is 162.5 percent.</p>

Outcome/output	Baseline	Goal	Progress towards the goal	Evidence	Valuation
			<p>Chiquitana almond, cocoa, sweet potato, chirimoya, beans, ocoró, pachío, cassava, criolla papaya, and Valles with peanut, arracacha, tumbo and maize.</p> <p>The project established four seed custodians, one in each macroecoregion (Altiplano, Chaco, Trópico and Valles) and 17 community seed banks (these were established with an emphasis on ecotypes cultivated and managed by the communities themselves), germplasm banks (through interviews and on-site visits during the evaluation, the team learned about the seed banks of the Technical University of Oruro, the Mayor, Royal and Pontifical University San Francisco Xavier de Chuquisaca, Monteagudo campus, and the Chauni Technological Institute), and wild fruit nurseries in the Amazonia and Trópico macroregions. Seed custodians and community seed banks contribute to <i>in situ</i> conservation of agrobiodiversity ecotypes, especially in cultivated species.</p> <p>The project generated 46 catalogues of ecotypes, which describe the characteristics of</p>		

Outcome/output	Baseline	Goal	Progress towards the goal	Evidence	Valuation
			<p>their cultivation or use in the forests and the local knowledge of the beneficiaries.</p> <p>The project coordinator informed the Evaluation Team that, in 2022, the project had been working on four catalogues of species in the development phase and a National Catalogue of Agrobiodiversity.</p>		
<p>Output 2.1.2</p> <p>Communities develop and implement management plans and participatory monitoring systems for <i>in situ</i> conservation and sustainable use of underutilized crop/plant ecotypes and their wild relatives (with at least 60 percent participation of women).</p>	<p>There is no record of agrobiodiversity management plans.</p>	<p>At least 20 communities practice <i>in situ</i> conservation through eight management plans and production plans for the sustainable use of agrobiodiversity (fauna, crops and wild relatives) with at least 60 percent participation of women, taking into account the advice on nutrition and resilience to climatic variability.</p>	<p>The project exceeded the goal by working with 26 communities where <i>in situ</i> conservation practices were promoted.</p> <p>Regarding management and production plans, the project exceeded the goal by developing nine management plans and two production plans. However, through consultation with the Agriculture Officer and LTO of the FAO Regional Office for Latin America and the Caribbean, it was shown that the plans for Charagua Norte, Zona Ibaziriri and Zona Machareti present observations on their content.</p> <p>The project recorded that 49 percent of women (1 498 women out of a total of 3 058 people) participated in the</p>	<p>Georeferenced reports of areas with species of cultivated and wild agrobiodiversity.</p> <p>Documentation of management plans.</p> <p>Documentation of production plans.</p>	<p>The achievement of the output goal is composed of:</p> <p>a) at least 20 communities practicing <i>in situ</i> conservation (40 percent is the expected contribution of the component to the total goal): 52 percent;</p> <p>b) eight management or production plans (30 percent is the expected contribution of the component to the total goal): 41.2 percent; and</p> <p>c) participation of women of at least 60 percent (30 percent is the expected contribution of the</p>

Outcome/output	Baseline	Goal	Progress towards the goal	Evidence	Valuation
			development of management plans. In particular, women, together with the men, signed the socialization and validation agreement for the implementation of these plans.		component to the total goal): 24.5 percent. The total level of compliance with the goal is 117.7 percent.
<p>Output 2.1.3</p> <p>Good practices documented for the cultivation and management of selected crop/plant ecotypes (based on community implementation in the five macroecoregions under Output 2.1.2) including: multiplication; conservation; improvement and exchange of local seeds; pest and disease control; and strategies for sustainable production intensification.</p>	A total of 67 examples of good practices applied to crop management and the use of agrobiodiversity species were identified, along with 13 practices implemented in cultural festivals and traditions related to agricultural production processes.	At least 35 new good practices implemented in crop management, and the use of agrobiodiversity species were identified, systematized and included in the information system.	<p>The project achieved the goal. These new or recovered practices were systematized in writing.</p> <p>The project produced 33 documents on good practices (Altiplano: 3; Amazonia: 13; Chaco: 8; Trópico: 5; and Valles: 4). There are seven food processing manuals (chocolate bars, cookies, jams and yoghurt) and a document on good manufacturing and post-harvest practices. In total, 41 documents that systematize good practices related to the ecotypes of agrobiodiversity are registered and were used in the training and support processes for the beneficiaries.</p> <p>These systematized documents are pending to be included in the SNIAgBD.</p>	Documents on good practices and food processing procedures.	<p>The goal of the output was exceeded in relation to the systematization of good practices in the management and use of agrobiodiversity species.</p> <p>The documents generated by the project in the National Information System still need to be included.</p> <p>The total level of compliance with the goal is 80 percent.</p>
<p>Output 2.1.4</p> <p>Strategy and action plan financed for the Ministry of Environment and Water</p>		An additional 125 communities in the project municipalities have been identified to	Based on the experiences generated by the project, the formulation of the National Agrobiodiversity Programme	Preliminary document of the National Agrobiodiversity Programme.	The goal of additional communities was exceeded (50 percent is the expected

Outcome/output	Baseline	Goal	Progress towards the goal	Evidence	Valuation
and the Ministry of Rural Development and Land to expand <i>in situ</i> conservation and the sustainable use model developed by the project (in at least 125 additional communities).		implement agrobiodiversity management plans, and the relevant ministries are committed to taking charge of their implementation.	was promoted, which will be implemented in 163 additional communities where management and cultivation plans will be promoted. The programme proposal was prepared with the Ministry of Environment and Water and disseminated in the five macroecoregions. The Ministry of Rural Development and Land did not participate in the formulation of the programme, which means there is no commitment on its part to intervene in additional communities.		<p>contribution of the component to the total goal) by 65.2 percent.</p> <p>The commitment of the Ministry of Environment and Water was achieved, but the implementation commitment of the Ministry of Rural Development and Land was not (50 percent is the expected contribution of the component to the total goal): 25 percent.</p> <p>The total level of compliance with the goal is 90.2 percent.</p>
<p>Output 2.1.5</p> <p>Permanent Monitoring Centre focused on selected species of cultivated and wild varieties, guaranteeing continuous monitoring of established genetic and climatic trends.</p>	No Monitoring Centre exists.	Preparation of guidelines, design and implementation of an agrobiodiversity monitoring system.	The project generated an SNIAgBD Protocol for the registration and management of documents and information on agrobiodiversity and a Monitoring Module in the SNIAgBD. This module is made up of the following sections: a) agrobiodiversity species and crops; b) GEOVISOR; and c) the control and monitoring of agrobiodiversity projects. The National Agrobiodiversity Information System does not include mechanisms to determine genetic and climatic	Procedures for filling out forms as part of the SNIAgBD, which includes a monitoring module.	<p>The goal was met with the creation of a protocol for managing documents in the National Information System and its project monitoring module.</p> <p>The total level of compliance with the goal is 60 percent.</p>

Outcome/output	Baseline	Goal	Progress towards the goal	Evidence	Valuation
			trends, nor does it have a specific monitoring system.		
<p>Outcome 2.2a</p> <p>Higher income generated by men and women farmers (approximately USD 500 per year per family, which represents an increase of 25 percent in annual income) in communities participating in the production, transformation and commercialization of agrobiodiversity-friendly products, and with nutrition labels for the selected crop/plant ecotypes.</p>	The average annual income of farmer families is USD 2 000.	The income of 2 300 family farmers (men and women) has increased by approximately USD 216 per year (representing a 5 percent increase in annual income), through the strengthening of productive capacities, transformation and commercialization, including agrobiodiversity and nutritional labelling.	<p>There are no documents or information available to determine the progress towards this goal. During the interviews with the beneficiaries, it was learned that there are different experiences regarding commercialization and the generation of income. However, this qualitative information is not enough to determine the annual increase in income of the beneficiary families.</p> <p>A socioeconomic study was carried out for the Altiplano, Amazonia and Chaco macrocoregions in 2017. This document describes the sources of income and the amounts, which could constitute the baseline to assess the increase in income.</p> <p>According to the project coordination team, the 2021–2022 management reports on annual family income in beneficiary families are being prepared.</p>	Socioeconomic study for the Altiplano, Amazon and Chaco macrocoregions (2017).	The assessment is not possible due to the lack of documents and information in this regard.
<p>Outcome 2.2b</p> <p>Areas under agrobiodiversity</p>	There are no areas (hectares) subject to production standards	At least 1 000 ha with agrobiodiversity production standards and	The project met and exceeded the goal, with 4 858.37 ha certified under organic	PGS certifications. Preliminary document of the National	The goal has two components.

Outcome/output	Baseline	Goal	Progress towards the goal	Evidence	Valuation
<p>production standards and with nutrition labels (monitored through the application of the GEF Biodiversity-2 tracking tool).</p> <p>Ministries with related responsibilities are committed to facilitating the expansion of agrobiodiversity conservation areas at the end of the project.</p>	<p>with agrobiodiversity and nutrition labels.</p>	<p>nutrition labels monitored through the application of the GEF Biodiversity-2 tracking tool.</p> <p>The relevant ministries have agreed to facilitate the expansion of an additional 2 500 ha in the proposal of the National Agrobiodiversity Programme.</p>	<p>production standards through the PGS mechanism:</p> <ul style="list-style-type: none"> - PGS Toledo: 887.60 ha; - PGS IVIPO: 85.71 ha; - PGS El Palmar: 2 338 ha (cultivated: 62.5 ha; wild: 2 175.5 ha); - PGS Panacachi: 48.37 ha; - PGS MIGA (Chiquitana almond): 110.55 ha; and - PGS Assembly of the Guarani People: 1 488.14 ha (cultivated: 309.61 ha; wild: 1 178.53 ha). <p>These areas were monitored with the established tracking tool.</p> <p>The project supported the obtaining of six SENASAG food safety certifications, which include the approval of labels for processed products with nutritional information. The beneficiary associations were: APROPALQUI, Integral Forestry Association of Agricultural Products of the Jericó Community (AFIPA), Villa Florida, ASICOPTA, Association of Amazonian Fruit Collectors and Processors of Trinchera (ARPFAT), and AAGROPAMA.</p>	<p>Agrobiodiversity Programme.</p>	<p>It reached 243 percent of the first goal (50 percent is the expected contribution of the component to the total goal).</p> <p>Regarding nutrition labelling, there is no quantifiable goal, but the respective records have been generated.</p> <p>The project reached 3 988 percent of the second goal.</p> <p>The total level of compliance with the goal is 4 231 percent.</p>

Outcome/output	Baseline	Goal	Progress towards the goal	Evidence	Valuation
			The National Agrobiodiversity Programme plans to establish 199 418 ha under integrated and sustainable agrobiodiversity management. For this reason, the project exceeded the goal of an additional 2 500 ha.		
<p>Output 2.2.1</p> <p>Agrobiodiversity-friendly product certification, and origin and nutrition labelling mechanism developed and used by farmers (of which at least 50 percent are women) for selected crop ecotypes based on product standards of SENASAG and agreed criteria for agrobiodiversity production practices.</p>	There is no record of certified agrobiodiversity products nor a mechanism for product labelling according to origin and nutrition.	Farmers from 50 communities (participation of at least 50 percent women) follow the standards established for agrobiodiversity certification and standards of origin and nutritional labelling, and their products have been certified based on the PGS method and SENASAG standards.	<p>The project met and exceeded the goal, with interventions in 62 communities that benefitted 453 families (37.96 percent women heads of household) and promoted the establishment of PGS systems.</p> <p>In this context, the project supported the obtaining of six SENASAG food safety certifications for processed products (APROPALQUI, AFIPA, Villa Florida, ASICOPTA, ARPFAT and AAGROPAMA). These certificates include the approval of product labels.</p> <p>In addition, the executors of the project indicated that a species labelling guide is being prepared.</p>	PGS documents and food safety certificates.	<p>The goal is comprised of:</p> <p>a) 50 participating communities, which was exceeded (60 percent is the expected contribution of the component to the total goal): 74.4 percent; and</p> <p>b) 50 percent participation of women (40 percent is the expected contribution of the component to the total goal): 30.4 percent.</p> <p>The total level of compliance with the goal is 104.8 percent.</p>
<p>Output 2.2.2</p> <p>Analysis of opportunities for marketing local agrobiodiversity food products, and</p>	From the list of species identified during the project preparation, none have a developed market. In addition,	By the end of the project, at least five agrobiodiversity value added food products, with agrobiodiversity and	The project met and exceeded the target for food products. Eleven agrobiodiversity food products have labels with nutritional value for the	Interviews Reports SENASAG label approval certificates.	<p>The goal has two components:</p> <p>a) The target of at least five value added food products with nutritional</p>

Outcome/output	Baseline	Goal	Progress towards the goal	Evidence	Valuation
<p>strengthening of links with markets for agrodiversity-friendly food products through a "Participatory marketing approach" (50 percent participation of women).</p>	<p>there is no use of agrodiversity or nutrition labels to market agrodiversity products.</p>	<p>nutrition labels, have stronger links with markets, as measured by the increase in sales, benefiting men and women equally.</p>	<p>commercialization of artisanal products. These are: açai pulp (AFIPA and AAGROPAMA); Brazil nut cookies (SOS Mujer); api, algarrobo flour and algarrobo jelly, as well as jams made from mistol, guayabilla, guava, cucurbita and sweet potato (Amandiya).</p> <p>Three proposals for nutritional labels are being prepared by different associations (EFRUSSAL and the Sombrefrut of the Association of Women Collectors of Achachairú, Churcani).</p> <p>The project worked with 27 associations and communities, providing technical assistance for the commercialization of value added products. Within this framework, business plans were developed for the associations. In this regard, a business plan was presented to the ACOS Association and five business plans were socialized with other associations (AFIPA, ARPFAE, ASICOPTA, MR TRP and MR ALT). Technical assistance and business plans support the generation of value added and marketing processes.</p>		<p>labels was exceeded (50 percent is the expected contribution of the component to the total goal): 110 percent.</p> <p>b) Strengthening of linkages with markets as measured by the increase in sales of these products (50 percent is the expected contribution of the component to the total goal). There is no information in this regard.</p> <p>The total level of compliance with the goal is 110 percent.</p>

Outcome/output	Baseline	Goal	Progress towards the goal	Evidence	Valuation
			<p>During the project execution, total income from the commercialization of agrobiodiversity products reached more than BOB 1.8 million. Of this amount, BOB 1.5 million correspond to the Amazonia macroregion, BOB 142 849 to the Chaco, BOB 91 180 to Valles, BOB 31 113 to the Altiplano and BOB 1 113 to Trópico. However, there is no information available to measure the increase in sales.</p>		

Component 3: Mainstreaming the conservation of agrobiodiversity in policies and regulatory frameworks, especially in relation to food security and nutrition

Outcome/output	Baseline	Goal	Progress towards the goal	Evidence	Valuation
<p>Outcome 3.1 Measures to conserve and sustainably use agrobiodiversity incorporated into policies, programmes and regulatory frameworks for agriculture, nutrition, health, education and food security.</p>	Four points out of a possible 12 on policy frameworks that incorporate agrobiodiversity conservation in the GEF tracking tool.	The score of the policy frameworks that incorporate the conservation of agrobiodiversity in the GEF monitoring tool is increased to at least 10 (out of 12 possible points).	<p>According to data from the monitoring tool, the score obtained up to the MTR was six points. It is estimated that the score will rise to seven due to the implementation that has been achieved of some municipal laws (for example, Municipal Law 072/2021 Monteagudo Municipal Autonomous Government on Food Consumption), even without the preparation of the respective regulation.</p> <p>The update of the management plan in the El Palmar ecological reserve includes mitigation actions for the control and management of introduced species, such as pine and eucalyptus.</p>		<p>70 percent compliance.</p> <p>Co-benefit: contribution to the control and management of invasive species in El Palmar.</p>
<p>Output 3.1.1 Multisectoral platform at the national level established within CONAN to promote and monitor the integration of agrobiodiversity in policies and programmes in the agriculture, nutrition, health and food security sectors.</p>	A biodiversity technical committee has been established within the existing CONAN multisectoral platform during the project preparation phase to integrate the conservation and sustainable use of agrobiodiversity in the agriculture, education, nutrition, and the	A multisectoral platform featuring an institutional mechanism for incorporating agrobiodiversity into agriculture, nutrition, health, education and food security sector policies.	<p>The CT-CONAN was established as the multisectoral platform for incorporating agrobiodiversity in the policies of various sectors. This was done by including the agrobiodiversity theme in the National Thematic Roundtables related to: a) Food and Nutrition in Daily Life; and b) Food Production with Food Security and Food Sovereignty. However, this had a limited impact, failing to influence any policy at the national level. In addition, the platform failed to function as a coordination mechanism to advance the national harmonization and complementarity of policies related to agrobiodiversity. At the local level, the CT-CONAN team had a greater impact through CODAN and COMAN. Considering these aspects, CT-CONAN still does not constitute a fully effective mechanism to incorporate agrobiodiversity into specific policies, despite having done so in local instances, such as the COMAN.</p> <p>The project supported the preparation of a work plan for CT-</p>	Minutes of meetings with the CT-CONAN and in areas of the COMAN.	Considering the influence of the project in some national government bodies, mainly in local entities, the total level of compliance with the goal is 80 percent.

Outcome/output	Baseline	Goal	Progress towards the goal	Evidence	Valuation
	health and food security sectors. However, it is not yet in operation.		<p>CONAN (Sector work plan 2016–2020) to facilitate the organization of its activities and coordination with local entities. From 2020 to 2021, the CT-CONAN relocated personnel and resources due to the impact of the COVID-19 pandemic.</p> <p>The local branches of CT-CONAN received the following support from the project:</p> <ul style="list-style-type: none"> - During the 2020 period, the project provided technical assistance to 21 COMANs (San Ignacio de Velasco, San Carlos, San Antonio, Porongo, El Torno, Concepción, Cotagaita, Presto, Toledo, Llalagua, Challapata, Chayanta, Aiquile, Puerto Carabuco, Tito Yupanqui, Filadelfia, Porvenir, Puerto Rico, Riberalta, Villa Nueva, Monteagudo and Caraparí). - Under the new authorities, during the 2021 period, technical assistance was provided to 19 COMANs (San Carlos, San Antonio, Porongo, Concepción, Cotagaita, Presto, Aiquile, Toledo, Challapata, Chayanta, Filadelfia, Porvenir, Puerto Rico, Riberalta, Villa Nueva and Monteagudo). - The project supported three CODANs: Chuquisaca, Oruro and Pando. 		
Output 3.1.2 New/adapted policies will be adopted and implemented to support the conservation and sustainable use of agrobiodiversity, considering its importance for nutrition, food security and	There are existing policies that promote the conservation and sustainable use of biodiversity resources: the Biodiversity Law; the Law on the Rights of Mother Earth; and Law 144.	Three new/adapted policies implemented and measures incorporated to conserve agrobiodiversity for food security and nutrition.	<p>The project exceeded the goal. It supported the CT-CONAN, CODAN and COMAN in the generation of regulatory frameworks for healthy eating and the use of agrobiodiversity, which were approved by their respective government councils. The project supported institutional processes in the operation of CODAN and COMAN. In this context, 16 laws were enacted at the municipal and departmental levels. This regulatory framework, generated with the support of the project, promotes the conservation of agrobiodiversity through its appropriate use and offers incentives for its use in food.</p> <p>The new regulatory framework is as follows:</p>	Documents of municipal and departmental laws.	<p>The goal was exceeded.</p> <p>Total level of compliance with the goal is 533 percent.</p>

Outcome/output	Baseline	Goal	Progress towards the goal	Evidence	Valuation
health.			<ol style="list-style-type: none"> 1. Departmental Law 146/2017 - Decentralized Autonomous Government of Santa Cruz, Declaration of cupesí or algarrobo as natural heritage; 2. Municipal Law 108/2019 - Autonomous Municipal Government of Cobija, Creation of COMAN; 3. Municipal Law 108/2019 - Autonomous Municipal Government of Cotagaita, Palqui Declaration; 4. Municipal Law 113/2019 - Autonomous Municipal Government of Riberalta, Declaration of Amazonian fruits as strategic products; 5. Municipal Law 412/2019 - Municipal Autonomous Government of San Ignacio, Declaration of the chiquitana almond as natural heritage; 6. Municipal Law 486/2019 - Municipal Autonomous Government of San Ignacio, Healthy consumption; 7. Municipal Law 082/2020 - Autonomous Municipal Government of San Antonio, Creation of COMAN; 8. Municipal Law 083/2021 - Municipal Autonomous Government of San Antonio, Healthy consumption; 9. Municipal Law 235/2020 - Municipal Autonomous Government of San Carlos, Creation of COMAN; 10. Municipal Law 236/2020 - Municipal Autonomous Government of San Carlos, Healthy consumption; 11. Municipal Law 456/2020 - Autonomous Municipal Government of San Ignacio, Creation of COMAN; 12. Municipal Law 135/2021 - Autonomous Municipal Government of Concepción, Creation of COMAN; 13. Municipal Law 369/2021 - Autonomous Municipal Government of El Torno, Creation of COMAN; 14. Departmental Law 452/2021 - Autonomous Departmental Government of Chuquisaca, Agricultural product development; 15. Municipal Law 01/2021 Autonomous Municipal Government of Philadelphia, Food promotion; and 16. Municipal Law 072/2021 Municipal Autonomous Government of Monteagudo, Food consumption. 		

Outcome/output	Baseline	Goal	Progress towards the goal	Evidence	Valuation
			The project also contributed to generating a ministerial resolution for the promotion of maize as a natural resource.		
<p>Output 3.1.3</p> <p>The conservation and sustainable use of agrobiodiversity mainstreamed in at least six programmes and projects implemented by the ministries in the multisectoral platform at the local and national levels.</p>	<p>Some programmes value the promotion of native species, but they are not supported by a long-term strategy or management plans for <i>in situ</i> conservation of agrobiodiversity. Only a few species from two/three macroecoregions are protected by existing programmes.</p>	<p>At least three national programmes and three local projects implemented by the ministries in the multisectoral platform have incorporated the conservation and sustainable use of agrobiodiversity to improve food and nutrition security.</p>	<p>The project supported the following two programmes with specific actions: a) presentation of investment projects to the EMPODERAR-IPDSA programme (partnership plans, especially in the Amazon); and b) formulation and presentation of a business plan for a freeze-drying plant in the Pando free-trade zone. This support made it possible to incorporate the sustainable use of agrobiodiversity into the institutions' proposals and their respective transformation, commercialization and primary production processes.</p> <p>In addition, the Technical Committee for Standardization 3-6, Fruits and Vegetables of the Bolivian Institute for Standardization and Quality supported and participated in the platform, generating a standard for refrigerated and frozen majo and moriche palm pulp.</p> <p>The project supported and promoted joint actions with the following six projects that incorporate agrobiodiversity:</p> <ul style="list-style-type: none"> • tarwi revaluation project, implemented by SDC/Universidad Mayor de San Andrés; • Forest and Farm Facility/ASICOPTA investment project for strengthening the production of açai pulp; • Forest and Farm Facility/AAGROPAMA BR investment project for integrated forest management; • pre-investment technical design studies for the Ministry of Productive Development and Plural Economy as part of the implementation of the Community Economic Organization plant; • ECOTIENDAS/Monteagudo Municipal Autonomous Government project for healthy food kiosks; and • investment project for infrastructure improvement in the 	<p>Interviews and proposal documents.</p>	<p>a) Three national programmes implemented by the multisectoral platform (50 percent contribution to the total goal): 25 percent.</p> <p>b) Three local projects implemented by the multisectoral platform (50 percent contribution to the total goal): 75 percent.</p> <p>The percentage of compliance decreased because not all the programmes and projects were supported by the ministries of the multisectoral platform.</p> <p>The total level of compliance with the goal is 100 percent.</p>

Outcome/output	Baseline	Goal	Progress towards the goal	Evidence	Valuation
			<p>Amandiya Community Economic Organization implemented by the Andean-Amazonian Pluricultural Community for Sustainability/University of Bern.</p> <p>The implementation of the programmes and projects at the national and local levels was not exclusively carried out by the ministries of the multisectoral platform.</p>		

Component 4: Communication and strengthening of capacities

Outcome/output	Baseline	Goal	Progress towards the goal	Evidence	Valuation
<p>Outcome 4.1 Greater awareness of the conservation, sustainable use and nutritional benefits of agrobiodiversity (measured through surveys, disaggregated by gender).</p>	<p>There is little awareness of agrobiodiversity as a resource for food and nutrition security in Bolivia.</p> <p>No stakeholders (institutions or local communities) are trained in understanding the links between agrobiodiversity conservation and food and nutrition security.</p>	<p>At least 30 percent of institutional staff (of whom 50 percent are women), consumers and producers who were targeted by awareness raising campaigns and training courses are aware of the nutritional benefits of local agrobiodiversity. The awareness level was measured via two surveys disaggregated by gender among the target groups of the campaigns and training courses throughout the nine departments of Bolivia.</p>	<p>Awareness raising processes and training courses were carried out with the participation of stakeholders related to agrobiodiversity. The 2020 KAP survey measured the effect of the project on the awareness of the stakeholders, although the results of the 2022 KAP survey are not yet ready.</p>	<p>Research documents and publications.</p>	<p>Due to the lack of information on the second KAP survey, it is not possible to determine the level of fulfilment of the goal.</p>
<p>Output 4.1.1 Preparation and dissemination of gender-sensitive promotional material on agrobiodiversity conservation, traditional knowledge, innovations and practices, agrobiodiversity and nutrition product standards and labels, production incentives, dietary benefits,</p>	<p>There are no important publications about underutilized species/ecotypes.</p> <p>There are no materials for the dissemination, promotion and awareness raising of agrobiodiversity conservation and its nutritional benefits.</p>	<p>Three publications that promote nutritionally rich and underutilized species/ecotypes of agrobiodiversity.</p> <p>Three publications that promote nutritionally rich foods from agrobiodiversity, recipes and processing methods.</p> <p>Twelve packages of materials for dissemination, promotion and awareness</p>	<p>The project exceeded the goal. It generated three publications promoting ecotypes: a) the booklet <i>Introduction to agrobiodiversity</i> (EMAGUA); b) the booklet <i>Agrobiodiversity conservation</i> (FAO); and c) the book <i>The diversity of native maize in Bolivia</i> (Ministry of Environment and Water) (Santos et al., 2021), which describes the characteristics of varieties cultivated in macroecoregions.</p> <p>The project also designed publications to promote foods based on agrobiodiversity, namely: a) 13 recipe books based on agrobiodiversity; and b) the forthcoming (2022) booklet <i>Good manufacturing practices</i> and the <i>Agrobiodiversity recipe</i>.</p>	<p>Published media articles and reports.</p> <p>Publications</p> <p>Documents related to the studies.</p>	<p>The first goal (25 percent contribution to the total value of compliance) was fully met with three publications promoting agrobiodiversity species: 25 percent.</p> <p>The second goal (25 percent contribution to the total value of</p>

Outcome/output	Baseline	Goal	Progress towards the goal	Evidence	Valuation
including case studies and comparative analysis in five macroregions of Bolivia.		<p>raising for producers, consumers, processors and policymakers, including gender-sensitive material.</p> <p>Case studies on the links between agrobiodiversity conservation, diversified diets, nutritional benefits and climate change.</p>	<p>Thirty-four project disseminating and promotional materials did not include any gender perspective.</p> <p>The following case studies were prepared:</p> <ul style="list-style-type: none"> - systematization of the Trinchera community productive enterprise experiences in the municipality of Porvernir-Pando; - native agrobiodiversity in food systems managed by indigenous women: experience of the Tentamí community of the Guarani people in Chuquisaca; - Chirimoya cresa: a sweet opportunity; and - case study report: native palqui forests, a source of protein for the communities of the Cotagaita valley in Potosí. <p>Studies in development:</p> <ul style="list-style-type: none"> • Experiences of Women in the Tentamí community, use of the Chirimoya cresa and Palqui; and • Production experience in the Altiplano and Amazonia (2022). 		<p>compliance) was exceeded by 108.3 percent (13 publications that promote food compared to the goal of three publications).</p> <p>The third goal on dissemination materials (25 percent contribution to the total value of compliance) was also exceeded: 70.83 percent.</p> <p>The fourth goal on case studies (25 percent contribution to the total value of compliance) was fully met: 25 percent.</p> <p>The total level of compliance with the goal is 229.1 percent.</p>
Output 4.1.2 National gender-sensitive information campaigns carried out to promote the value of agrobiodiversity as a	There is little awareness of agrobiodiversity as a resource for food security. The baseline was established at the	Information campaign targeting at least 500 000 people (50 percent women), including general public, urban and rural producers and consumers,	<p>The project far exceeded the goal. It reached more than 2 million people through the following communications means or tools:</p> <p>a) Technical assistance was provided in rural areas (Valles and Trópico) with 44 programmes aired on radio stations of the Loyola Cultural Action</p>	<p>Meeting minutes</p> <p>Programmes on good nutrition</p> <p>Facebook</p>	<p>The goal was comprised of:</p> <p>a) people targeted by information campaigns</p>

Outcome/output	Baseline	Goal	Progress towards the goal	Evidence	Valuation
resource for food security, through official and popular media channels.	beginning of the project.	<p>government technical staff, policymakers and other stakeholders. The campaigns include:</p> <ul style="list-style-type: none"> - a national media plan (radio and television) aimed at the general public; - a media plan with messages addressed to the authorities; - five local events to exchange experiences; - four roundtables and/or forums; - an informative project platform dedicated to communications; - five events in local schools; and - six public events. 	<p>Foundation, Patujú, Lomerío. The programmes can be heard on Facebook. For example:</p> <p>Programme 1: www.facebook.com/radioaclochuquisaca/videos/514400406270467</p> <p>Programme 22: www.facebook.com/radioaclochuquisaca/videos/364129458756079</p> <p>b) Healthy eating was promoted in eight news slots on TVU Pando.</p> <p>c) Two platforms (Facebook and Twitter) were used regarding agrobiodiversity on social networks. There is no evidence that quantifies the participation of women on these platforms.</p> <p>Two national media plans and media strategies (2019 and 2020–2022) were generated by the project. The plans and the strategy identified the stakeholders and the type of messages to be communicated. The goal was met.</p> <p>A total of 19 local events were held to exchange experiences: a) during 2021, the exchange of experiences was carried out by MINGA, EFRUSSAL, Semillas Tentamí, FEDEFAP, Good Manufacturing Practices, Asaí, Sañuta, Challapata Belen, ACROPALQUI, Presto and INIAF Chuquisaca; b) an exchange of experiences in the CT-CONAN was carried out in 2021; c) in the 2018–2020 period, the project supported meetings of cocoa producers, the MINGA association, and events for the exchange of seeds and experiences with chefs.</p>	<p>(www.facebook.com/AgrobiodiversidadBol)</p> <p>Twitter (https://twitter.com/Agrobiodiversi2)</p> <p>National Media Plan</p>	<p>(20 percent contribution to the total value of compliance): 80 percent;</p> <p>b) national media plan for public opinion (20 percent contribution to the total value of compliance): 20 percent</p> <p>c) media plan for authorities (10 percent contribution to the total value of compliance): 10 percent;</p> <p>d) exchange of experiences (10 percent contribution to the total value of compliance): 38 percent;</p> <p>e) roundtables, forums (10 percent contribution to the total value of compliance):</p>

Outcome/output	Baseline	Goal	Progress towards the goal	Evidence	Valuation
			<p>The project carried out five roundtables and forums. In 2020, a cycle of dialogues was held, as well as the COMAN Cobija Roundtable, and the Food Security and Nutrition Roundtable. In 2021, the project participated in the webinar organized by the Bolivian Association for Research and Conservation of Andean Amazon Ecosystems and the 18th Latin American Congress of Genetics.</p> <p>The project used Facebook and Twitter to report on its activities and disseminate information related to agrobiodiversity.</p> <p>The project held five events in educational centres for the tasting of processed agrobiodiversity food during school breakfasts. These were as follows:</p> <ul style="list-style-type: none"> - Workshop on Raising awareness among parent representatives about the importance of the municipal law on healthy eating, Aiquile Municipality; - Workshop on Sensitization of fifth grade students on healthy eating and nutrition, Aiquile Municipality; - Workshop on Healthy diet and junk food with first and second grade secondary students from the Educational Unit Villa Granada, Aiquile Municipality; - Workshop on Healthy eating and junk food with third and fourth grade secondary students from the Educational Unit Villa Granada, Aiquile Municipality; and - Workshop on Healthy eating and junk food with fifth and sixth grade secondary students from the Educational Unit Villa Granada, Aiquile Municipality. 		<p>13 percent;</p> <p>f) communications platform (10 percent contribution to the total value of compliance): 0 percent;</p> <p>g) events in schools (10 percent contribution to the total value of compliance): 10 percent; and</p> <p>h) public events (10 percent contribution to the total value of compliance): 10 percent.</p> <p>The total level of compliance with the goal is 181 percent.</p>

Outcome/output	Baseline	Goal	Progress towards the goal	Evidence	Valuation
			The project promoted various public events: a) a webinar organized by the Bolivian Association for Research and Conservation of Andean Amazon Ecosystems and Latin American Association of Genetics; b) the Departmental Meeting of Pando Amazon Fruits; and c) public roundtables, forums and exchange of experiences.		
<p>Output 4.1.3 Producers, processors, local government technical staff (average 50 percent women) trained in conservation, use and nutritional benefits of agrobiodiversity through training events in the nine departments of Bolivia.</p>	<p>No local technical staff or institutional stakeholders were available to support the training process in agrobiodiversity and nutrition.</p> <p>No local producers, processors and organizations are trained in the subject matter of the project.</p>	<p>At least 30 percent of the 150 local government technical officers (at least 60 women) were trained by the project and have applied their new skills.</p> <p>A network of at least 25 agrobiodiversity facilitators was established and trained and took part in issues of <i>in situ</i> agrobiodiversity conservation and food and nutrition security.</p> <p>At least five relevant local organizations involved in the project have participated in the training process on agrobiodiversity.</p> <p>At least 25 percent of the 1 500 producers (300 per macroecoregion, of which 150 are women), processors and other stakeholders in</p>	<p>The goal was exceeded by the project in relation to the training of public officers. A total of 740 local government technical officers (393 men and 347 women) received training through workshops and municipal coordination. There is no information available on the application of the skills obtained.</p> <p>The project promoted groups of youth and producers in two of the five macroregions (Altiplano: 7 facilitators and Amazonia: 22 facilitators) to form a network of agrobiodiversity facilitators in each macroregion.</p> <p>The project achieved the participation of the following organizations: 1) municipal governments; 2) governors; 3) universities; 4) NGOs; and 5) programmes and projects of the national government in local areas and associations of beneficiary producers.</p> <p>The project enabled the participation of 1 631 men and 1 520 women in workshops for conservation, healthy eating and good manufacturing practices.</p> <p>There is no documentation or data regarding the application of new skills by the trained producers.</p>	Participation records	<p>The goal is comprised of the following components:</p> <p>a) trained officers apply their new skills, where 60 percent are women (25 percent contribution to the total value of compliance): no information available;</p> <p>b) network of facilitators (25 percent contribution to the total value of compliance): 29 percent;</p> <p>c) participation of organizations (25 percent contribution to the total value of compliance): 25 percent; and</p>

Outcome/output	Baseline	Goal	Progress towards the goal	Evidence	Valuation
		the value chain and users trained by the project have applied their new skills.			<p>d) producers trained and application of new knowledge (25 percent contribution to the total value of compliance): no information available.</p> <p>The total level of compliance with the goal is 54 percent.</p>
<p>Output 4.1.4 Strengthening of the capacities of policymakers and technical staff of the national government (at least 40 percent women) on the use of agrobiodiversity in nutrition and food security through:</p> <p>a) training modules on the use of agrobiodiversity for nutrition and health programmes, developed and implemented; and</p> <p>b) guidelines to</p>	<p>No national technical staff or institutional stakeholders are supporting the training process in agrobiodiversity and human nutrition.</p> <p>The number of nutritionists providing support is negligible at the start of the project.</p>	<p>At least 30 percent of the 100 national government technical staff (at least 40 women) trained by the project have applied their new skills.</p> <p>At least ten relevant public and private institutions in the country are involved in the training process on agrobiodiversity and human nutrition.</p> <p>A total of 30 trained nutritionists (INLASA, laboratories and universities) promote the benefits of nutrition-rich agrobiodiversity.</p>	<p>The project provided training for 47 public officers linked to the national government, including 13 women. The evaluation of the application of new skills was not carried out.</p> <p>A total of 14 institutions were involved in training processes on agrobiodiversity and human nutrition, of which 7 are local public entities, namely the Ministry of Health, Ministry of Planning, Universidad Mayor de San Andrés, IBMETRO, INLASA, CT-CONAN and SENASAG.</p> <p>Through the project, 30 nutritionists and health personnel were trained in the FAO/INFOODS workshop (86.6 percent participation of women). There is no information on the promotion carried out by the trainees on the nutritional benefits of agrobiodiversity.</p>	Participation records	<p>The goal has the following components:</p> <p>a) trained public officers have applied their new skills (40 percent contribution to the total value of compliance): no information available;</p> <p>b) relevant institutions involved in training (30 percent contribution to the total value of compliance): 42 percent; and</p>

Outcome/output	Baseline	Goal	Progress towards the goal	Evidence	Valuation
<p>improve the use of local agrobiodiversity products in traditional food systems, which have been prepared and promoted.</p>					<p>c) trained nutritionists promote the benefits of agrobiodiversity (30 percent contribution to the total value of compliance): no information available.</p> <p>The total level of compliance with the goal is 42 percent.</p>

Component 5: Monitoring, evaluation and dissemination of information

Outcome/Output	Baseline	Goal	Progress towards the goal	Evidence	Valuation
Outcome 5.1 Implementation of the project through results-based management and application of the findings and lessons learned from the project in future operations.		Project outcomes were achieved and their sustainability has been demonstrated.	The experience developed with the project generated knowledge to promote sustainable production processes. The formulation of the National Agrobiodiversity Programme is a reflection of the results of the project and its sustainability. For this reason, the project achieved the stated goal.	Ownership of agrobiodiversity in food strategies in local and departmental governments, as well as the strengthening of initiatives developed by producer associations to generate food products based on agrobiodiversity.	Total level of compliance with the goal: 100 percent.
Output 5.1.1 Project monitoring system running and providing systematic information on progress towards the achievement of the outcome and output objectives.	The framework of the project's results offers project output and outcome indicators, targets and a baseline.	Eight semi-annual progress reports	The project generated M&E tools on a monthly basis. Ten semi-annual progress reports were submitted to the Ministry of Environment and Water in relation to the execution of the project.	Excel files used for monitoring. Semi-annual reports.	Total level of compliance with the goal: 125 percent.
Output 5.1.2 Mid-term and terminal evaluation carried out.		Two evaluation reports	A mid-term evaluation of the project has been carried out. The final evaluation of the project (2022 period) is in process.	Mid-term evaluation report.	Total level of compliance with the goal: 80 percent.

Outcome/Output	Baseline	Goal	Progress towards the goal	Evidence	Valuation
<p>Output 5.1.3 Good practices and lessons learned of the project were disseminated and published through the project information system.</p>		<p>The following documents have been disseminated through the information system:</p> <ul style="list-style-type: none"> a) report on the methodology related to the FAO/INFOODS international standards, collections of food samples and their analysis; b) reports on the two nutrition indicators for agrobiodiversity and diet diversification; c) gender-sensitive methodological report on the characterization of native species, practices used for <i>in situ</i> conservation and the geographic information system; d) commercialization of agrobiodiversity and nutritional labelling; and e) 35 good practices 	<p>The documentation generated by the project (methodologies, good practices, nutrition data and case studies) will be stored in the SNIAgBD, as reported by the executors.</p>	<p>Modules established for the storage of documents in the SNIAgBD.</p>	<p>Considering that the National Information System is in the testing phase, the total level of compliance with the goal is 80 percent.</p>

Outcome/Output	Baseline	Goal	Progress towards the goal	Evidence	Valuation
		widely disseminated (see Output 2.1.3).			

Annex 1. Survey format

Indicate your gender:

- Female
- Male
- Rather not say

Did you participate in any training sessions through the project?

- Yes
- No

If you answered "No" skip to question 6.

Indicate on what topics you received training on (you can mark more than one option):

- Agrobiodiversity and nutrition; nutritious recipes
- Agroecological production
- Agroforestry systems
- Productive chains, marketing and sales
- Product transformation (added value)
- Preparation of management plan
- Good manufacturing practices, food quality and food safety
- Organizational strengthening
- Business plans for agrobiodiversity species
- Other:.....

Was your training useful?

- Not useful at all
- Not very useful
- Moderately useful
- Very useful

Indicate how you have used the knowledge acquired in the training sessions (you can mark more than one option):

- I continue to collect forest fruits
- I continue to transform forest fruits into value added products
- I continue to sell the fruits and vegetables that the project taught me how to grow or gather

- I continue to plant the traditional crops that the project recommended on my farm
- I continue to apply the good practices that the project taught me on my farm
- I have replicated the planting of the crops that I learned about during the project on other farms or land belonging to me or a family member
- I have taught or helped my classmates to grow or gather their own traditional vegetables or fruits
- I have not applied what I learned in the project

What are the benefits of agrobiodiversity?

Do you know what adaptation to climate change is?

- Yes
- No

Give an example of how agrobiodiversity helps adaptation to climate change:

What are the benefits of the fruits or crops that you planted/harvested with the support of the project?

As a result of the project, do you now eat traditional fruits or vegetables recommended by the project?

- Yes
- No

What traditional fruits or vegetables do you eat?

Thank you very much for your support in filling out the survey!