

CLIMATE INVESTMENT FUNDS

January 13, 2017

**[[APPROVAL BY MAIL]: BOLIVIA: FINANCIAL MANAGEMENT OF CLIMATE CHANGE RISK THROUGH AGRICULTURE INSURANCE-
(PPCR, PSSA) (IDB) (PPCRBO601A)**

RESPONSE FROM IDB

No.	Country	Date	Contact Person	Comments
1	Germany	December 23, 2016	Katharina Stepping	<p>1. Germany highly appreciates the innovative approach to transfer part of the financial risk associated with the Pachamama Agriculture Insurance Program (PAIP) from the Bolivian Government to the insurance market by layering the loss coverage structure. Yet, even if the project successfully achieves a reduction in the Government's maximum exposure to financial losses cause by extreme climate events, it does not seem certain that the PAIP will be financially sustainable as the Government still has to pay for all insurance premiums in the proposed new structure. Thus, we would appreciate a clarification if (limited) payments or in-kind contributions from private households for insurance coverage have also been considered when designing the project. In the same vein, it remains unclear if accompanying adaptation measures are planned in order to reduce the farmers' risk of losses due to climate related extreme events. Examples such as the African Risk Capacity show that creating incentives for smallholder farmers to reduce their risk can be successfully integrated in climate risk insurance schemes. Thus, we recommend explaining how the project intends to reduce the farmers' risk in the medium-term in addition to providing an agricultural insurance, thereby also fostering the financial sustainability of the PAIP itself. (Response required prior approval)</p> <p>Response: As part of Bolivia's strategy to protect agricultural production from natural disasters and climate change, the PIRWA was created with the aim of providing multi-risk catastrophic agricultural insurance to subsistence farming families (with up to 3 hectares of cultivated land) in municipalities with high levels of extreme poverty. Since its creation, the Government of Bolivia has been absorbing all</p>

the costs resulting from the coverage provided by the PIRWA insurance. At the same time, the current agricultural insurance market is very underdeveloped and insurance companies face significant barriers to participate in this market segment.

The proposed project seeks to limit the exposure of public finances due to this climate risk management initiative already underway while also promotes the participation of insurers to start developing the agricultural insurance market.

Given the nature of the PIRWA beneficiaries, their current low productivity due as much to their farming practices as to the size of their plots, the Government does not contemplate, for the foreseeable future, any gradual transfer of some/partial responsibility for premium payments to farmers. Therefore, limited payments or in-kind contributions will not be requested as part of the proposed scheme. Nevertheless, the payment of premiums over time will be gradually shared among central and local governments or municipalities. In fact, PIRWA is already collecting a participation fee to participating municipalities, which varies per municipality according to its poverty level, that is applied to defray the administrative (such as loss adjustment costs) of running the program.

To ensure financial sustainability of the on-going program, the new scheme proposes a more efficient budget allocation that limits the risk exposure assumed by the Bolivian Government and therefore, caps the potential burden on the national budget. This is achieved by structuring a three-level coverage where INSA will cover the losses emerging from the first layer of coverage and the payment of premiums for the excess loss coverage provided by the insurance companies as part of the second layer, while the third layer will be covered by the FES.

As mentioned earlier, even though this could be considered as an additional cost to the Government in the short term, but it ensures efficiency in budget allocation and catastrophe risk exposure financing in the long term.

More importantly, the scheme promotes the development of the agricultural insurance market. In this sense, it is expected that as more insurance products start to develop in the agricultural sector, other sizable farmers (small- and medium-size) will be able to get insurance and pay, therefore, the premiums. Through the technical cooperation program under implementation, the IDB is also supporting activities to support the development of commercial insurance policies.

Regarding the comment on adaptation measures, as mentioned in the proposal, during the stage of program implementation, the team will coordinate efforts with other programs promoting investment incentives related to climate adaptation in areas catered by the PAIP, as a way to reduce the farmers' risk in the medium-term. In addition to providing an agricultural insurance, thereby also fostering the financial sustainability of the PAIP itself.

The present project is part of a more comprehensive program for promoting climate change adaptation in rural areas of Bolivia. The project intends to complement IDB's existing programs through the use of a financial instrument: insurance, which increases the resilience of the most vulnerable farmers in Bolivia to the effects of climate change, helping them to protect their investments and allow them to re-establish their activities when they suffer from the effects of extraordinary adverse weather events. At the same time, it promotes the participation of insurance companies, supporting the development of the agricultural insurance market and building local capabilities in terms of the use of

financial response mechanisms for climate resilience in the agricultural sector.

IDB has been supporting Bolivia through the financing of adaptation technologies in agriculture that can boost productivity, reduce income volatility of small-size farmers and increase food security. Since the year 1996, the IDB has implemented loan operations in projects related to innovation and sanitation in agriculture, sanitation and land management and irrigation, among others. For example, the IDB has supported Bolivia through three programs to expand and improve community irrigation systems. Between 1996 and 2005, the National Irrigation Program (PRONAR) financed 158 projects, upgrading infrastructure on 8,000 ha, benefitting more than 12,000 families and bringing irrigation to more than 14,000 has. From 2009 to 2015, the National Irrigation Program with a Watershed Approach (PRONAREC) financed 54 systems and incorporated irrigation into 9,060 ha, benefitting 10,691 families. Lastly, PRONAREC II, in execution since 2014, has to date contracted 73 projects to bring an additional 12,604 has under irrigation for 14,800 families. In June 2016, the IDB approved an additional program in support of Bolivia's irrigation system (PRONAREC III) which intends to continue the experience of the previous programs, proposing tools for supporting increased investment in the sector as well as for rounding out quality irrigation infrastructure, with greater efficiency and with socioeconomic and environmental sustainability.

2. The proposal states that “the project is in line with sub-activities of component 3 of the SPCR” (cover page, p. 1). Moreover, “[...] PAIP, through PIRWA, would provide insurance coverage against climate risks to those municipalities that are part of the public PPCR projects that

are being implemented under the SPCR” (p. 9). However, no information is provided on the potential synergies between the proposed project and on-going public and private investments under the PPCR in Bolivia, which are apparently operating in the same municipalities. This seems to be particularly relevant in the case of the Inclusive Finance to Improve Climate Resilience of Bolivian Agricultural Producers as well as the Multipurpose Drinking Water and Irrigation Program for the Municipalities of Batallas, Pucarani and El Alto projects. We therefore kindly ask providing detailed information on the complementary and potential synergies of the proposed project with other on-going PPCR projects in Bolivia. **(Response required prior approval)**

Response: During the stage of program implementation, the Bank will coordinate efforts with other programs promoting investment incentives related to climate change adaptation in areas catered by the PAIP, in order to generate synergies both for the smallholder farmer and the PAIP itself.

Potential synergies can specially be found between our project and the Multipurpose Drinking Water and Irrigation Program for the Municipalities of Batallas, Pucarani and El Alto, currently under implementation. On the one hand, component 2 of the Multipurpose program is focused in communities located in the Jacha Jahuira basin and the Khullu Cachi basin. Both of these areas have small and subsistence farmers that have no access to efficient and modern irrigation systems. In such sense, the program provides these communities with access to irrigation systems at the community level for the efficient use of water and increased agricultural productivity with adaptation to climate change. On the other hand, the PIRWA, currently operating at the national level, caters to subsistence farming families municipalities with the highest levels of extreme poverty and vulnerable to effects of climate change such as the ones

located in the Jacha Jahuira basin and the Khullu Cachi basin. In such sense, under the Integrated Strategy for Climate Change Adaptation, these projects would be providing both technology and insurance to vulnerable farming families in these communities, increasing their climate change resilience. In order to achieve these synergies, institutional arrangements will need to be established between the appropriate authorities once the proposed project is under implementation.

In terms of the project Inclusive Finance to Improve Climate Resilience of Bolivian Agricultural Producers, there is an important potential for synergies once this project is approved and the agricultural insurance market starts to develop. The former aims to facilitate investment in climate resilient technologies to improve the productivity of small and medium size farmers.

As mentioned previously, once the agricultural insurance market starts to develop and more products are available it is expected that other sizable farmers (i.e. small and medium) will also be able to access catastrophic insurance. As a result, it is expected that said farmers will not only be able to have greater access to credit, but at a lower cost. This is particularly true since, Law 393 of Financial Services (Art. 99) states that acceptable guarantees to access loans that will finance productive activity, both rural and non-rural, include the insurance alternatives proper of such activities (i.e. agricultural insurance).

3. Germany welcomes that the proposed results framework makes clear reference to PPCR core indicators A, C and D. However, it does not specify how the project intends to contribute to core indicators B (Degree of integration of climate change in national, including sector planning) and E (Quality of and extent to which climate responsive

instruments/ investment models are developed and tested). We therefore kindly ask to describe if and how the project intends to contribute to these core results of the PPCR. In addition, the results related to core indicator D (Evidence of strengthened government capacity and coordination mechanisms to mainstream climate resilience) are only monitored in economic terms (proposed indicators: 1. Savings on premium payment to insurers 2. Maximum government exposure to PIRWA's losses). This is despite the fact that an accompanying technical assistance package foresees several complementary activities to support the development of an agriculture insurance market (e.g. through climate information, technical trainings). Given the importance of these complementary activities for core indicator D, we suggest elaborating in detail how the respective results will be monitored. **(Response required post approval)**

Response: Regarding core indicator D, given that most activities related to the institutional capacity of the executing agency and other stakeholders are taking place through IDB's technical cooperation, the corresponding results are being monitored as part of this TC and have not been previously included in the result framework of the proposed loan. These indicators include, but are not limited to: (i) number of trained market stakeholders; (ii) number of INSA staff trained; (iii) number of technical studies regarding the improvement of the PIRWA; and (iv) published information report on agricultural production in the Insurance Information System (IIS).

In terms of indicators B and E, the team will analyze in more detail the contribution to both core indicators and present them post approval.

4. It is mentioned that “[g]iven the importance of women in the subsistence agriculture sector, the INSA, as the responsible agency for registering beneficiaries in the PIRWA coverage, will take into account gender considerations in their outreach strategy.” (cover page, p. 2). Yet, no further information is provided in this respect and no gender-specific indicators are included in the results framework. Thus, we kindly ask specifying how the gender considerations will be taken into account (both in the outreach strategy and beyond) and how this will be monitored. **(Response required prior approval)**

Response: Currently, the INSA does not have a gender criterion to determine the eligibility of the program beneficiaries. For that reason, no information/statistics are currently collected regarding gender. However, INSA is planning to begin the process of gathering information on gender for its reports. Once this information is collected we can proceed to elaborate gender-specific indicators.

5. Given the innovative approach of the proposed project, we see a high potential for knowledge sharing and learning. Germany is currently supporting the implementation of two projects in the region which also focus on agriculture and climate risk insurances (Integrated financial management of climate risks in the agricultural sector in Peru as well as Support to the resilience of vulnerable population in the Rural Area of East Paraguay). We recommend actively engaging with these two projects and exchanging the emerging lessons and good practices from the respective approaches. **(Response required post approval)**

Response: Following the recommendation, the team will exchange lessons learned and good practices with other teams/organizations implementing similar projects in the region. The team will reach out in order to engage with the teams of the aforementioned projects.

2	UK	December 29, 2016	<p>Gaia Allison Forests and Land Use Adviser Climate and Environment Department, DFID Glasgow G75 8EA +44 (0) 1355 84 3903 g-allison@dfid.gov.uk</p>	<p>1. Similarly to the comments from Germany, we would like to have clarity on the payment of premiums over time. At the moment it appears that government covers the cost. If the purpose of the layering is to bring costs of insurance (and therefore cost of premiums) down, and to ensure sustainability, then we might expect to see a gradual transfer of some/partial responsibility for the payment of premiums to farmers. Ability to cover own insurance premiums could be an indicator of improvement in agricultural efficiency/production. Is this envisaged and if so, how will it be achieved? Without it, will there be a disincentive to farmers to invest in climate smart agricultural improvements (see next point)? (Response required prior approval)</p> <p>Response: As part of Bolivia's strategy to protect agricultural production from natural disasters and climate change, the PIRWA was created with the aim of providing multi-risk catastrophic agricultural insurance to subsistence farming families (with up to 3 hectares of cultivated land) in municipalities with high levels of extreme poverty. Since its creation, the Government of Bolivia has been absorbing all the costs resulting from the payment of losses to the beneficiaries of the PIRWA insurance. At the same time, the current agricultural insurance market is very underdeveloped and local insurance companies face significant barriers to participate in this market segment.</p> <p>Given the nature of the PIRWA beneficiaries, their current low productivity due as much to their farming practices as to the size of their plots, the Government does not contemplate, for the foreseeable future, any gradual transfer of some/partial</p>

responsibility for premium payments to farmers. Therefore, limited payments or in-kind contributions will not be requested as part of the proposed scheme. Nevertheless, the payment of premiums over time will be gradually shared among central and local governments or municipalities. In fact, PIRWA is already collecting a participation fee to participating municipalities, which varies per municipality according to its poverty level, that is applied to defray the administrative (such as loss adjustment costs) of running the program.

Regarding the risk of providing a disincentive to make adaptation investments, the program is actually part of a broader strategy of the country for the adaptation of the agriculture sector to climate change (see comment above). Furthermore, INSA will consider adaptation investments carried out by producers during the process of risk analysis and insurance policy design.

2. We note the reference to lessons learnt from other IDB supported initiatives in the region (1.22), that investment in climate smart agriculture is an important way to help farmers minimise their exposure to risk and one assumes, over time, to reduce the cost of premiums. There are references to linking this initiative to other IDB investments in climate smart agriculture, and to the overlap with geographical areas of PPCR project implementation, but it is not clear if and how the other initiatives will provide the technical support to subsistence farming families to do this. This seems particularly important amongst those families identified in para 1.4 that use “ancestral techniques” which rely on traditional agricultural calendars. **(Response required prior approval)**

Response: As it is mentioned above, the IDB has been supporting

Bolivia through the financing of adaptation technologies in agriculture that can boost productivity, reduce income volatility of small-size farmers and increase food security. The National Irrigation Program (PRONAR) The National Irrigation Program with a Watershed Approach (PRONAREC, PRONAREC II in execution since 2014, and PRONAREC III approved in 2016) have provided substantial support to Bolivia's irrigation system and intends to continue to do so by proposing tools for supporting increased investment in the sector as well as for rounding out quality irrigation infrastructure, with greater efficiency and with socioeconomic and environmental sustainability. For example, an innovation provided by one of the programs currently under execution, is the creation of a platform for subsistence producers to find and receive training about irrigation technologies as well as financial assistance to acquire them. This type of initiative is valuable for producers to improve their productivity, reduce their vulnerability to climate risks and potentially have access to financing and better insurance coverage.

Also, as mentioned in a previous response, during the stage of program implementation, the Bank will coordinate efforts with other PPCR programs promoting investment incentives related to climate change adaptation in areas catered by the PAIP. Potential synergies can specially be found between the proposed project and the Multipurpose Drinking Water and Irrigation Program for the Municipalities of Batallas, Pucarani and El Alto, currently under implementation. The program provides these communities with access to irrigation systems at the community level for the efficient use of water, facilitating the improvement of agricultural productivity. In such sense, these projects would be providing both technology and insurance to vulnerable farming families in these communities under an integrated approach that will

increase their climate change resilience.

3. It would be helpful to have fuller details of how the SLF will “grow” to adequately cover catastrophic events, and replenish. **(Response required prior approval)**

Response: The financial projections of the SLF show that the size of the Fund allows for an accumulation of resources that is sufficient to both cover the losses caused by catastrophic events and fully repay the PPCR loan (see Program’s Financial Projections). Therefore, the SFL could achieve the objectives of the project, maintaining high levels of solvency, liquidity and profitability.

4. We note the important accompanying technical assistance package of \$US620,000 to strengthen capacities of key government and insurance institutions. We would be grateful for clarity on where this is being financed from. Is it from IDB (ref 1.32)? **(Response required prior approval)**

Response: The resources of the technical assistance come from the IDB’s Disaster Risk Prevention Fund managed by the IDB.

3 USA January 5, 2017 Katie Berg

1. Dear Mafalda, Thanks for the opportunity to review this interesting project. We were pleased to see an insurance project come forward. We have questions similar to those of the UK and Germany. It would be useful to have more information on the profile of the risk to be covered under each layer, as well as on how climate smart agricultural practices will be incentivized under this scheme. In addition, we would appreciate more information on the financials of the SLF -- how was the figure of \$10 million (100% of required capital?) arrived at, and how will the SLF be recapitalized, if necessary, after a major payout? Also, it was unclear from the document how advanced discussions are with the insurers

who are expected to cover the second layer. What will happen to the SLF, and the PPCR loan, if insurers are unable or unwilling to participate? Has the IDB/government done any cost scenarios with regard to the transfer of the second tranche to the insurers? Thanks much, Katie Berg U.S. Treasury Department. **(Response required prior approval)**

Response: As part of the activities of the technical assistance financed by the IDB, an international specialized firm has been hired to design the SLF coverage, determine the most efficient risk level by layer and, among other activities, estimate the costs to structure each layer (see Extract from the study: Conditions for the risk transfer of the catastrophic insurance program PIRWA).

Regarding the capitalization of the SLF after a major payout, the design and operational regulations of the program limit the coverage of the SFL to amounts that do not affect the financial sustainability of the fund, so as to maintain the necessary technical reserves. This way the SLF is expected to be able to generate sufficient capitalization in order to achieve the objectives of the program.

The consulting firm has also established contacts with private insurers and reinsurers to assess their interest to participate in the program. Coverage pricing and layering take out proposals by INSA/IDB were well received by the industry, and strong private insurers' participation in the new coverage is expected.

Please, refer to our answers to previous comments on the subject of incentives to climate change adaptation investments.