Submission by the Plurinational State of Bolivia

Views from Parties and admitted observer organizations on the matters referred to in paragraph 47 of document FCCC/CP/2012/L.14/Rev.1, including information, experience and good practice relevant to the design and operation of various approaches.

47. *Requests* the Subsidiary Body for Scientific and Technological Advice to conduct a work programme to elaborate non-market-based approaches, with a view to recommending a draft decision to the Conference of the Parties for adoption at its nineteenth session;

1. Scope of the work programme to elaborate non-market-based approaches and mechanisms

According to the Plurinational State of Bolivia, for elaboration of the work programme Parties should prioritize the consideration of non-market based approaches currently under discussion on the work of the Ad Hoc Working Group on Long-term Cooperative Action under the Convention, including the establishment of specific Mechanisms for the implementation of the non-market based approaches, such as the "Joint Mitigation and Adaptation for the Integral and Sustainable Management of Forests" developed by the Plurinational State of Bolivia.

The decision for the development of the work programme to be agreed at the nineteenth session of the Conference of the Parties, must take into account the following paragraphs:

1. *Decides* to undertake a work programme on non-market-based approaches to consider under the Convention non-market based approaches that contribute to mitigation and adaptation to climate change, including joint mitigation and adaptation approaches.

2. *Invites* the President of the Conference of the Parties to appoint a co-chair for the work programme mentioned in paragraph 1 above;

3. *Requests* the chair, supported by the secretariat, to coordinate the activities of the work programme with the work under the Subsidiary Body for Scientific and Technological Advice related to methodological guidance for the development of non-market-based approaches on mitigation and adaptation to climate change.

4. *Decides* that the aim of the work programme is the following:

(a) To establish the Mechanisms and institutional arrangements for the operation of the non-market-based approaches including the elaboration of procedures and methodologies for such mechanisms.

(b) To define the operation of the different Mechanisms and approaches under the guidance and authority of the Conference of the Parties;

(c) To contribute to the ongoing efforts to scale up and improve the effectiveness of finance, capacity building and technology transfer for different non-market-based approaches and mechanisms oriented to achieve the ultimate objective of the Convention.

(d) To establish linkages through the non-market-based Mechanisms to be developed between the Convention on climate change and the Convention on Biological Diversity.

5. *Decides* to initiate the development under the work programme of the "Joint Mitigation and Adaptation Mechanisms for the Integral and Sustainable Management of Mother Earth and Forests".

6. *Decides* to undertake the work programme including one in-session workshops to receive view of parties on issues related to paragraph 4 above, and request the chair to prepare a report on the workshop.

7. *Requests* the chair, supported by the secretariat, to prepare a technical paper on modalities and procedures for the approaches and mechanisms, drawing on the conclusions of the workshop, the submissions of parties on non-market-based approaches and mechanisms under the Ad Hoc Working Group on Long-term Cooperative Action under the Convention, a technical paper, and experience of existing non-market-based mechanisms, with a view to the Conference of the Parties adopting a decision on this matter;

8. *Decides* that the work programme shall end by the twentieth session of the Conference of the Parties unless the Conference of the Parties decides otherwise;

2. The background of the Joint Mitigation and Adaptation Mechanism for the Integral and Sustainable Management of Mother Earth and Forests proposed by Bolivia to the UNFCCC

Following the mandate of the World Conference on the "Rights of People and Mother Earth" held in Tiquipaya, Bolivia in April 2010, the Plurinational State of Bolivia has questioned the implementation of forests market-based schemes. The Plurinational State of Bolivia questions the linking of forests to global carbon markets and only to mitigation since this authorizes the commodification of the environmental functions of Mother Earth, considered sacred by Bolivian society, into a commercial commodity, thus allowing the transfer of responsibilities for mitigation of climate change from developed to developing countries, fostering the latter to continue subsidizing the former. In addition, these arrangements, mediated by the market, may lead to the loss of sovereignty by States and people with regard to the use and management of their natural resources.

Beyond the ethical considerations, mentioned above, there are important reasons that justify the establishment of non-market compensatory approaches. Such approaches should strengthen the integral and sustainable management of forest and systems of life as a basis for enhancing mitigation and adaptation co-benefits to climate change, while considering

explicitly the multiple benefits of forests, biodiversity concerns, and social and economic issues into the contributions of forests to coping with climate change. This approach should thereby enhance local and national forest governance as a way of improving people's livelihoods, based on climate friendly and resilient economic development, while ensuring sustained reduction of carbon emissions (mitigation) and moderating the adverse effects of climate change through a range of actions targeted at the vulnerable systems of life and peoples (adaptation). This means developing mitigation and adaptation measures while explicitly considering the goals of socio-economic development and environmental concerns.

In this context the constitution of the "Joint Mitigation and Adaptation Mechanism for the Integral and Sustainable Management of Forests" was presented by the Plurinational State of Bolivia at the COP17 in Durban-South Africa and adopted as paragraph 67 of the decision 2/CP.17. Also, the proposal was presented at the COP18 in Qatar-Doha and adopted the paragraph 38 about how non-market-based approaches such as joint mitigation and adaptation could be developed.

Paragraph 67 of the UNFCCC decision 2/CP.17

67. Notes that non market based approaches, such as joint mitigation and adaptation approaches for the integral and sustainable management of forests as a non-market alternative that supports and strengthens governance, the application of safeguards as referred to in decision 1/CP.16, appendix I, paragraph 2(c–e), and the multiple functions of forests, could be developed;

Paragraph 38 of the decision FCCC/CP/2012/L.14/Rev.1

39. Requests the Subsidiary Body for Scientific and Technological Advice, at its thirty eighth session, to consider how non-market-based approaches, such as joint mitigation and adaptation approaches for the integral and sustainable management of forests, as referred to in decision 2/CP.17, paragraph 67, could be developed to support the implementation of the activities referred to in decision 1/CP.16, paragraph 70, and to report on this matter to the Conference of the Parties at its nineteenth session;

Also, at the COP11 of the Convention on Biological Diversity (CBD) held at Hyderabad-India (October, 2009) in the agenda item related to biodiversity and climate change and related issues, it has been agreed to request the Executive Secretary of the CBD to compile information with regard to the possible contribution of joint mitigation and adaptation approaches to the objectives of conservation of biodiversity and its sustainable use.

Paragraph 17 of the Decision UNEP/CBD/COP/11/L.27

17. Further requests the Executive Secretary, subject to the availability of funds, to compile information from Parties on initiatives and experiences regarding paragraph 67 of

UNFCCC decision 2/CP.17 with regard to its possible contribution to the objectives of the Convention on Biological Diversity, without pre-judging any future decisions by the Conference of the Parties to UNFCCC, and to submit a progress report to the Conference of the Parties to the Convention on Biological Diversity prior to its twelfth meeting;

Consequently, the SBSTA work programme oriented to elaborate non-market-based approaches must take into account the establishment of different Mechanisms such as the "Joint Mitigation and Adaptation Mechanism for the Integral and Sustainable Management of Mother Earth and Forest", as a mechanism that has a holistic and integrated vision of climate change and biodiversity while also integrating joint mitigation and adaptation to climate change.

It is important in the context of the UNFCCC to constitute the "Joint Mitigation and Adaptation Mechanism for the Integral and sustainable management of Mother Earth and forests, to foster the role of forests in mitigation and adaptation to climate change, advancing also on an additional agreement of the Outcome Document of Rio +20 which calls for the "development of different approaches, visions, models and tools available to each country, in accordance with its national circumstances and priorities, to achieve sustainable development in its three dimensions which is our overarching goal" (paragraph 56 of Rio+20 document).

3. The basis for the development of the "Joint Mitigation and Adaptation Mechanism for the Integral and Sustainable Management of Mother Earth and Forests" (JMA) as a non-market based approach

It is important to highlight the impacts of climate change on ecosystems and forests. As stated in the IPCC 4AR[1], forest ecosystems have long been subjected to many human-induced pressures and climate change constitutes a new and additional pressure that could change or endanger these ecosystems. The report highlights the potential impacts of climate change on forest ecosystems and new findings indicate that negative climate change impacts may be stronger than previously projected, particularly in South America.

Although, it is widely recognized that forests have a dual role in mitigation and adaptation to climate change, there is limited literature on forest adaptation and only recently has the UNFCCC agreed to consider ecosystem adaptation and forestry in the context of the Subsidiary Body for Scientific and Technological Advise. After extensive lobbying by Bolivia in Durban it was agreed that the Nairobi Work Programme would organize a workshop to consider the adaptation, ecosystem and forest link[2].

[1] Intergovernmental Panel on Climate Change (IPCC). Fourth Assessment Report: Climate Change 2007. Chapter 9: Forestry.

[2] This workshop will be important in the context of the Convention in consideration of practices that can support adaptation in forest ecosystems, including changes in land use options, management intensity, appropriate hardwood and softwood species mix, timber growth and harvesting patterns within and between regions, changes in rotation periods, salvaging dead timber, promoting species more resilient to the new climatic conditions, landscape planning to minimize fire and insect damage, support for effective fire management, and other appropriate measures.

Also, the IPCC 4AR identified the need to explore the possibility of incorporating adaptation practices into mitigation projects to reduce vulnerability, and recommended that Parties under the Convention should consider and address this finding. Further, the report suggests that guidelines may be necessary for promoting synergy in mitigation as well as adaptation programmes and that integrating adaptation practices in such mitigation projects would maximize the utility of the investment flow and contribute to the enhancement of institutional capacity to cope with risks associated with climate change.

Consequently a Joint Mitigation and Adaptation Mechanism is needed in order to promote the establishment of non-market based approaches such as joint mitigation and adaptation approaches for the integral and sustainable management of forests.

The Joint Mitigation and Adaptation Mechanism is designed to effectively advance non-market based approaches considering mitigation and adaptation co-benefits to climate change through the integral and sustainable management of systems of life of Mother Earth and forests; considering that this has a direct impact on the processes and actions of mitigating and adapting to climate change which must be understood as two inseparable and indissoluble aspects. That is:

- At the core of the integral and sustainable management of forests are the following issues: strengthening of forest governance; developing integrated management of systems of life (earth, water, forests and biodiversity), sustainable use of forest, agriculture and livestock productive systems; improving local people's livelihoods.
- The actions following the integral and sustainable management of forests create the best conditions to minimize the risk and vulnerability of ecosystems and of local populations to climate change and take advantage of opportunities with important implications for adaptation.
- Also, the intervention in the integral and sustainable management of forests is oriented to maintain the environmental functions of forests including mitigation, but this can only be generated as a sustainable process of climate change mitigation through the adaptation of forests and people living in forests and other ecosystems, including different rural actors such as medium and small-scale agriculture, livestock and forestry producers, indigenous communities and local populations.
- Also, it is considered that adaptation practices could be incorporated synergistically in most mitigation projects in the forestry sector and related ecosystems. The IPCC has suggested that several principles can be defined and applied to prioritize mitigation activities that help to reduce pressure on natural resources, for example the careful consideration of vulnerability to climate change as a risk to be analyzed in mitigation activities; prioritizing mitigation activities that enhance local adaptive capacity, and promoting sustainable livelihoods of local populations.
- Therefore, mitigation and adaptation are integrated efforts resulting from the strengthening of the integral and sustainable management of forests. The IPCC also indicated that the complementarity between many of the options for adaptation and mitigation, and that the further exploitation and promotion of synergies between mitigation and adaptation, could also advance sustainable development,

The overriding priority of this approach is to achieve sustainable development and eliminate poverty. In this context actions that generate adaptation and mitigation co-benefits should be sought to reduce deforestation, halt the loss of forest biodiversity, maintain environmental functions, reduce land and resource degradation, and facilitate the transition to better land use through the development of more sustainable production systems and contribute to climate change mitigation and adaptation of ecosystems and people.

3.1 Foundations of the JMA

Considering that systems of life of Mother Earth and forests should be regarded in the framework of the multiple dimensions of integral and sustainable development, and in view of appropriate international guidance and experiences, including from the UNFCCC Adaptation Framework, the Joint Mitigation and Adaptation for the integral and sustainable management of Mother Earth and forests should be based on the following foundations:

- Reinforces the principle that environmental functions of the Mother Earth and forests must not be converted into commodities and the understanding that forests are much more than mere reservoirs of carbon, since they are living systems of Mother Earth.
- Recognizes and supports the efforts of indigenous and local populations' collective action to strengthen local institutions regarding integral and sustainable management of forests and forest landscapes and as well as of other rural producers and local populations.
- Strengthens local resource uses and production practices of local and indigenous people oriented to the conservation and integral and sustainable management of forests and forest landscapes, including use of land, water and biodiversity.
- Promotes good productive and environmental practices of rural producers, including small- and medium-scale rural actors, indigenous communities and local populations devoted to agriculture, livestock and forestry productive activities.
- Contributes to tackle the contextual conditions and the underlying causes of deforestation and forest degradation taking into account the ecosystem approach, land-use planning, land tenure issues and improvement of autonomous forest governance at the local level.
- Promotes actions to build the resilience of socio-economic and ecological systems, including through economic diversification and sustainable management of natural resources, biodiversity conservation and the sustainable use of its components, and the enhancement of the sustainable livelihoods of local peoples.
- Develop climate change impact, vulnerability and adaptation assessments in multiple forest ecosystems including assessments of financial needs as well as economic, social and environmental assessment of adaptation options;
- Takes into account that actions for the adaptation and mitigation of forest must be based on local practices and knowledge and many forest communities and indigenous people have a detailed knowledge of their environment, and have developed strategies for adapting to perennial and longer-term climate variability.

- Mindful of the importance of these practices and knowledge, the unprecedented rates of changes may challenge this knowledge and the capacity of learning, requiring the development of new strategies and skills, and that this gap must be addressed.

3.2 The non-market-based approaches window to be established by the Green Climate Fund Board at the UNFCCC including the JMA

The JMA mechanism should be constituted in the context of the UNFCCC as a dedicated **window to be established by the Green Climate Fund Board (GCF),** under non-market based approaches.

The provision of financial support for the JMA should be fulfilled through new, additional and reliable funding that will come from a variety of sources, both public and private (outside the markets). The funding should be developed in a direct, expedite and immediate way according to national strategies and priorities, fully respecting the sovereignty and national capacities of developing countries. External sources of finance may be derived from the following sources:

(a) **External Public funds**, transferred from the "**Green Climate Fund**".
(b) **Ethical private funds**, fundraising activities targeting international private funds outside carbon markets, which can be channeled directly to the national level.

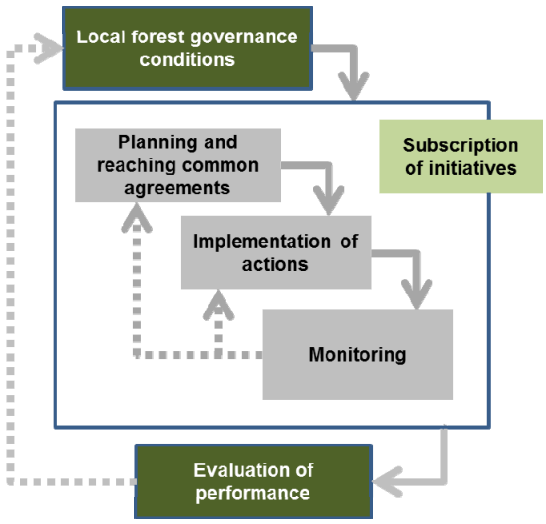
3.3 The Joint Mitigation and Adaptation approach for the Integral and Sustainable Management of Forests and Mother Earth as a national experience undertaken by the Plurinational State of Bolivia

Bolivia is making an important effort to establish this approach at the national level in order to orient those Parties interested in implementing mitigation and adaptation to climate change in the context of non-market based approaches based on the integral and sustainable management of forests. Therefore, Bolivia has developed some basic methodological orientations in order to properly set out this approach at the national level and to shed light into the international arena.

a) The methodological basis

The joint mitigation and adaptation approach for the integral and sustainable management of forests is based on territorial planning carried out in territorial jurisdictions (municipalities, indigenous territories and communities). This approach promotes effective coordination between public, community and other relevant stakeholders through agreements setting common objectives and/or targets related to indicators of joint mitigation and adaptation actions to climate change.

This approach considers the following indicative methodological steps:



i) Strengthening of local forest governance conditions to improve the effective impact of the approach at the local level.
ii) Implementation of three related processes to guide and orient the approach, which are: planning; reaching common agreements regarding the implementation of articulated actions; and monitoring.
iii) Evaluation of performance which is the assessment of the achievement of joint mitigation and adaptation indicators through the integral and sustainable management of forests.

It is recommended that the implementation of the approach should be based on a process of voluntary subscription of the local initiatives of integral and sustainable management of forests under this framework, allowing the integration of practices that are already working at the local level, which in turn should be strengthened through this process in a context of mitigation and adaptation to climate change.

The approach is based at the national level on the implementation of three successive components such as the following:

Components	Description
1. **Strengthening of local forest governance conditions**	1.1 Land tenure issues 1.2 Development of autonomous units of governance at different levels for the management of systems of life and forests
2. Planning and reaching common agreements	2.1 Development of territorial planning. 2.2 Reaching agreements on common objectives and/or goals between public, community and private actors (local forest users) regarding integral and sustainable management of forests' indicators.
3. Implementation of actions	3.1 Identification of State´s obligations and society' responsibilities. 3.2 Conditional transfers of finance, technical assistance and technology (instruments of promotion) for the achievement of joint mitigation and adaptation indicators. 3.3 Articulation of instruments of promotion with instruments of regulation and control of forest management.
4. Monitoring	4.1 Monitoring of indicators for joint mitigation and

adaptation to climate change.

Strengthening of local forest governance conditions

This approach will achieve better outcomes in tackling the drivers of deforestation and forest degradation since it enforces a context of clear land tenure rights and decentralization of forest policy instruments and autonomy in decision making regarding resource use. Also, better indicators of performance will be attained if local organizations and institutions responsible for the management of forests are respected, strengthened and promoted. If countries still do not fulfill these conditions, the action through this approach should channel financial and technological support in order to clearly improve the establishment of this scenario related to strengthen forest governance.

Territorial planning and reaching common agreements. This implies the formulation of simplified process of participatory territorial planning in local jurisdictions (or "Plans of Life" in indigenous communities) to determine the land and land-forest uses, and building a baseline benchmark regarding the implementation of the joint mitigation and adaptation to climate change. In turn, this process allows coordination and reaching agreement on common objectives and/or goals of the overall public, community, indigenous people and private actors regarding the integral and sustainable management of forests in the selected territorial jurisdiction. The overall goals are themselves a result of the articulation of goals of smaller territorial units (related to communal or individual owners). These are employed in turn to establish the goals and indicators to be monitored and evaluated at the local level and aggregated at the national level.

Implementation of actions. It is related to the effective combination at the local level of three related processes such as the following:

i) The identification and setting of States' responsibilities and society's obligations in the promotion of integral and sustainable management of forests.
ii) The arrangements of conditional transfers of finance and technology to public, community and private actors (local forest users) aimed at fulfilling the objectives and/or targets of integral and sustainable management of forests.
iii) The selection and articulation of a bundle of instruments for regulation, control and promotion of the integral and sustainable management of forests.

Monitoring. It involves the monitoring of forest condition at multiple levels (i.e. local, sub-national and national) emphasizing the development of monitoring systems arranged and implemented by local and indigenous people based on indicators comprising social, economic and environmental aspects associated with the integral and sustainable oriented to mitigation and adaptation to climate change.

b) Characteristics of the intervention

The joint mitigation and adaptation approach as a network for coordination. The implementation of the approach at the national level is not intended to be a bureaucratic public entity; rather it should operate in practice as a smart unit of coordination and

articulation through building networks (horizontal and vertical) in different institutional and social levels and arenas, promoting the following:

- Subscription of ongoing initiatives of integral and sustainable management of forests and systems of life into the approach for support and strengthening.
- Articulation of public efforts including the development of a bundle of instruments: both for land use and forest regulation, control and promotion, to provide services to local initiatives developing integral and sustainable management of forests. This includes coordination at the central level of government and with subnational autonomous governments (departmental, municipal and indigenous autonomous governments).
- Articulation of common objectives and/or goals among local public, community and private actors regarding indicators of joint mitigation and adaptation to climate change.
- Development of an institutional platform for the articulation of national actions regarding forests and climate change.

Territorial units of intervention as providers and producers of services. The approach prioritizes interventions at the level of municipal and indigenous territorial jurisdictions, although it is oriented to build larger scale articulations in order to achieve greater impact in settings such as political and administrative jurisdictions (i.e. departments or regions) and macro ecological regions. In the framework of the approach such units of intervention exert a dual role in the provision of services and as production units. The provision of services refers to the jurisdictional unit in which services are provided while the production refers to those responsible for the supply of specific products. The result should be a combination of small and large jurisdictions on the service supply side alongside a mix of small and large units, both public and private, on the production side.

Subscription of initiatives. The approach is based on strengthening the ongoing experiences related to the development of integral and sustainable management of forests and systems of life. Through the process of subscription, such initiatives are initially registered and included as part of the approach in order to be strengthened and supported through the bundle of instruments. In the process of subscription, the approach recognizes the multi-institutional arrangements at the local level: public, private and community, in which the initiatives of integral and sustainable management of forests are developed.

4. Comparison between market-based (Payment of Ecosystem Services) and non-market-based approaches (Management of Environmental Functions) regarding systems of life of Mother Earth and forests

Market-based approaches are based on the "Payment of Ecosystem Services (PES)" which is oriented to create linkages between buyers and sellers of environmental functions, then reaching the scope of the markets to environmental public functions.

Non-market based approaches are based on a completely different rationale beyond the functioning of the markets. Then, the important question is: what is beyond markets? The work of Elinor Ostrom, Nobel winner award at 2009, has been devoted to understand what

is beyond the market-based approach. Ostrom refers that there are four types of goods and services according to their distinctive characteristics of jointness of use or consumption and exclusion, which are: public goods, private goods, common-pool resources and tolls goods (see figure above: types of goods)[3]. Ostrom's work concludes that most environmental functions are public goods and then patterns of organization that can mobilize coercive sanctions are necessary for the operation of a public economy based on governmental institutions. Private goods and services which are feasible of exclusion and of alternative use should be organized through the markets, that is, where exclusion is feasible, however market institutions will fail to supply satisfactorily levels of public goods and services. In the case of common-pool resources, where exclusion may be infeasible in the sense that many users cannot be denied access, to supply them it is necessary to have recourse to some form of collective action in which sanctions can be used to foreclose the holdout problem.

Thus, since environmental functions are mostly public and common-pool resources, the markets have no much to contribute to climate change and the sustainable use of the components of biodiversity. The following table presents a comparison between market-based and non-market-based approaches taking as an example the case of REDD+ (Reduction of Emissions of Deforestation and Forest Degradation).

The Plurinational State of Bolivia concludes that non-market-based approaches lies on expanding the reach of rights, responsibilities, rights and obligations to nature, instead of expanding the reach of markets, which frames the understanding of the concept of "Management of Environmental Functions" (MEF) instead of the PES. The distinction beetwen the PES and MEF is carried out in the following table taking in to account the example of the work on REDD+ (Reduction of Emissions on Deforestation and Forest Degradation).

Comparison between the characteristics of REDD+ and the Joint Mitigation and Adaptation Mechanism for the Integral and Sustainable Management of Mother Earth and forests (JMA)

REDD+ characteristics	Problems of REDD+ Extracted from CIRAD 2012 (*)	Characteristics of the JMA
The theoretical basis		
REDD+ employs the premise of **rational choice:** governments and forest users decide to deforest or not based on an economic balance, and can be stimulated to make rational decisions not to deforest if the relative	"This theory assumes that the State is in a position to base decisions on cost-benefit analysis, and that having done so, it is capable to implement and enforce the appropriate policies and measures which could translate into reduced deforestation. In reality, public decision-making is influenced by a number of factors beyond rational	It is based on **second generation theories of collective action** related to institutional economics, and polycentric arrangements combining public governance, collective action of communities and private efforts.

[3] Ostrom, Vicent and Elinor Ostrom (2002). Public Goods and Public Choices. En Polycentricity and Local Public Economies (págs. 75-106). Ann Arbor: The University of Michigan Press.

REDD+ characteristics	Problems of REDD+ Extracted from CIRAD 2012 (*)	Characteristics of the JMA
prices of alternatives are offered.	economic choice, including weak governance, low administrative capacities, corruption and conflicts of interest in decision-making between government departments and public agencies" (page 13)	
The scope of the approach		
REDD+ is merely focused on an approach interested in the role of forests in mitigation	"Early research from REDD+ projects shows that the fundamental concerns of leakage, lack of additionality and high costs and uncertainties in quantifying emission reductions remain" (page 10).	An approach based on the joint mitigation and adaptation to climate change through the integral and sustainable management of forests and systems of life.
Baselines and performance		
Baseline established using reference levels for forest cover and emissions	"Thorough examination of the various approaches to determining crediting baselines and "reference levels" concludes that no approach can reliably determine future deforestation rates, and baselines will to a large extent be politically determined, leading to risks of "hot air" and windfall effects, or of not rewarding genuine efforts, which undermine the objectives of REDD+" (page 11).	Development of territorial planning (or "Plans of Life" in the case of indigenous people) in order to set up a referential baseline considering indicators of joint mitigation and adaptation to climate change.
Financial options		
Funding based on markets or the payment of performance ex-post results (quantified emissions reductions): to pay forest owners and users to reduce emissions and increase removals.	"The assumption that funds would come from carbon markets may prove incorrect. In parallel, the REDD+ debate needs to move away from a preoccupation with sources of finance and decide on an architecture which best supports the appropriate policies to meet REDD+ objectives. It is critical for REDD+ policy makers and donors to understand that most "performances" will need previous "investments" in various sectoral activities to strengthen governance and institutional capacity" (page 13).	Sustained ex- ante public funding (climate debt) based on the performance of joint mitigation and adaptation indicators (integrating Aichi targets of the Convention of Biological Diversity) through the integral and sustainable management of forests, to be reported voluntarily by developing country Parties. Also finance would support the development of an appropriate governance framework within which to develop actions supported by the approach.
Types of payments		
REDD+ is based only on financial incentives through the basic idea	"In the range of instruments governments could adopt as part of REDD+ policies, financial	Setting an integrated scheme of diverse instruments: planning, regulation, control, promotion,

REDD+ characteristics	Problems of REDD+ Extracted from CIRAD 2012 (*)	Characteristics of the JMA
of the Payment of Environmental Services (PES). It also should become an additional local subsidy.	incentives can cover only activities where the opportunity costs are low, while regulation, proportionate law enforcement, demand-side measures and political will are needed to stop the development of the more profitable drivers to deforestation" (page 14).	monitoring and evaluation of performance, linked to conditional transferences regarding the fulfillment of joint indicators of mitigation and adaptation.
Drivers of deforestation and forest degradation		
It mentions repeatedly but in its design it does not take into account seriously policies for tackling the drivers of deforestation and forest degradation.	"There is a clear need to support policies aimed at securing collective tenure as property rights to local communities and indigenous peoples. Critical to the environmental and development objectives of REDD+ is support for land tenure reform and, if appropriate, support for decentralized management of natural resources" (page 15).	The approach takes fully into account legal and policy reforms leading to improved management, use and conservation of forests while considering that key policies for tackling drivers of deforestation and forest degradation are related to the following: Land tenure rights; decentralization and autonomy in forest management; strengthening community institutions, and the wider governance framework.
Role of the private sector		
The role of the private sector in REDD+ is generally outlined as buyers or sellers of carbon credits.	"The role of the private sector, aside from as buyers or sellers of carbon credits, has generally been neglected in the REDD+ discussion, despite the fact that the trade in carbon credits has led more to speculation than to investment. More serious consideration is needed of the role that private companies could play in a national REDD+ strategy" (page 15).	Private sector engagement focused on productive investment and engagement in integral and sustainable management of forests.
Developing an appropriate scale of intervention		
REDD+ is oriented to support projects with different levels of scale and performance.	"… the international efforts towards reversing tropical forest cover loss are insufficiently focused on supporting large scale strategic programmes linked to emerging national and sub-national REDD+ strategies, including addressing the drivers of deforestation. Overall, support is geared to enabling specific, smaller scale forest-based projects which do not influence national policy or	Working in an appropriate scale (departmental and municipal governments) which allows achieving interesting targets in joint mitigation and adaptation while combining local participation and agreements in shared objectives and goals of integral and sustainable management of forests.

REDD+ characteristics	Problems of REDD+ Extracted from CIRAD 2012 (*)	Characteristics of the JMA
	alter development pathways" (pag. 17).	

(*) Karsenty, A., Tulyasuwan, N., Ezzine de Blas, D. 2012. Financing Options to Support REDD+ Activities. Based on a Review of the Literature. CIRAD. Funded by the European Commission.

Since to date conventional REDD+ has been centered only on mitigation issues, it has been unable to address satisfactorily the issues of joint mitigation and adaptation and the integral and sustainable management of forests. Also, REDD+ is a carbon-centered approach based on results-based actions (quantification of emissions of CO2 units) structured on the basis of rational theory and market-based approaches rationale and, mostly, in the payment of ecosystem services. For some, safeguards are the key in this approach in order to achieve multiple benefits (including ecological, social, cultural and economic benefits) of mitigation. Since under this approach it is difficult to incorporate the measurement of additional variables in the context of mitigation beside carbon units, the multiple benefits of forests are still marginal. Also, REDD+ has methodological problems in the development of performance baselines for quantifications of emission reductions, in the incorporation of environmental and developmental co-benefits, and in giving a meaningful role to the private sector beyond global carbon markets, among other related issues.

The Joint Mitigation and Adaptation as a non-market based approach has a different rationale. It is based on the second generation theories of collective action[4] developed by Elinor Ostrom (Nobel laureate in economics at 2009) and colleagues of the Workshop in Political Theory and Policy Analysis (Bloomington-Indiana, USA). Also, it is based on the understanding of polycentric arrangements (multiple domains of organization) combining public governance, collective action of communities of various scales and private efforts, with greater importance attached to the community.

The implementation of the approach requires the provision of financial support in the form of and technology transfer. Financial support in the form of **"sustained ex-ante funding"** is required based on the performance of joint mitigation and adaptation indicators through the integral and sustainable management of forests, leading to the establishment of broad conditions, among them: improved governance, management, and use of forests and systems of life, conservation and restoration of forests, biodiversity and environmental functions, development of local people's sustainable livelihoods, and facilitating the transition to more optimal land use through the development of more sustainable production systems that reduce deforestation and forest degradation. In this context, the transfer of ex-ante funding and technology from developed to developing country Parties is based on the trustworthiness of agreements with host governments to implement cross-sectoral and integrative policies and measures, to be reported voluntarily by developing country Parties and in accordance with their national circumstances and priorities.

[4] Second generation theories of collective action acknowledge the existence of multiple types of individuals rather than a uniform 'rational egoist'. In these theories, trust, trustworthiness, and reciprocity are key words that are consistent with different models of individuals, allowing the understanding of the critical role of collective action in the management of forests, ecosystems and biodiversity.