



Workshop on “Sharing information and experiences on forest and tree-based ecosystem services for socio-ecological resilience to climate change in Africa”

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Interaction between **Forests-people-climate change** in **Africa: contribution of AFF's work**

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Plan



Introduction and rationale for the study



Objectives of the study



Data collection methodology and analysis



Key findings, discussion, conclusion and recommendations



Key messages and policy implications



Acknowledgements

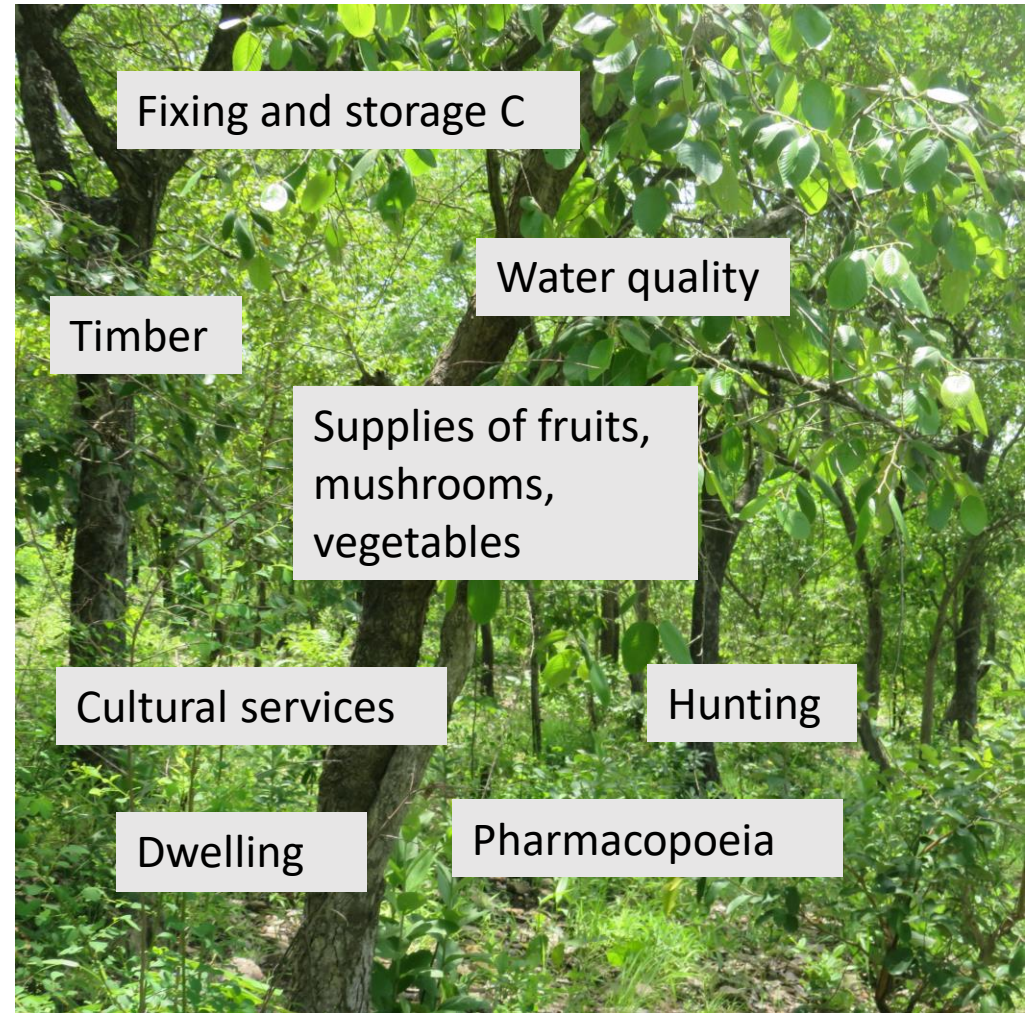




Introduction and rationale for the study

Knowledge on the intricate relationship *forest-people-livelihood-climate change* could help profile forest-based solutions to key emerging issues such as climate change, poverty and natural resource degradation

Information does not exist for many countries and where it exists statistics are often questionable.



Forests provide goods and services





Introduction and rationale for the study

There is a need to explore how the management of African forest's contributes to climate change mitigation and adaptation for people's well-being and national development.

Two projects funded by SDC and SIDA aiming at generating knowledge to support sustainable forest management in the context of climate change in different African landscapes.



Key messages from these knowledge products synthesize to make them readily available to policy makers and practitioners





Objectives of the study

- To explore and analyze AFF's knowledge products on **management of forest and trees as it relates to people, their livelihoods and climate change** and synthesize major results / achievements as well as potential knowledge gaps and research needs.

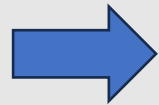




Approach of the synthesis and analysis

In the CADIMA web tool, the documents were sorted first, from title and abstract and second from full text,

After reading each document, the following information was extracted:



- Date; Authors; Language, Type, Thematic area; Study areas; Issues addressed; Objectives; Methods ;
- documents type and analysis done;
- Key results;
- Recommendations;
- Gaps



Approach of the synthesis and analysis

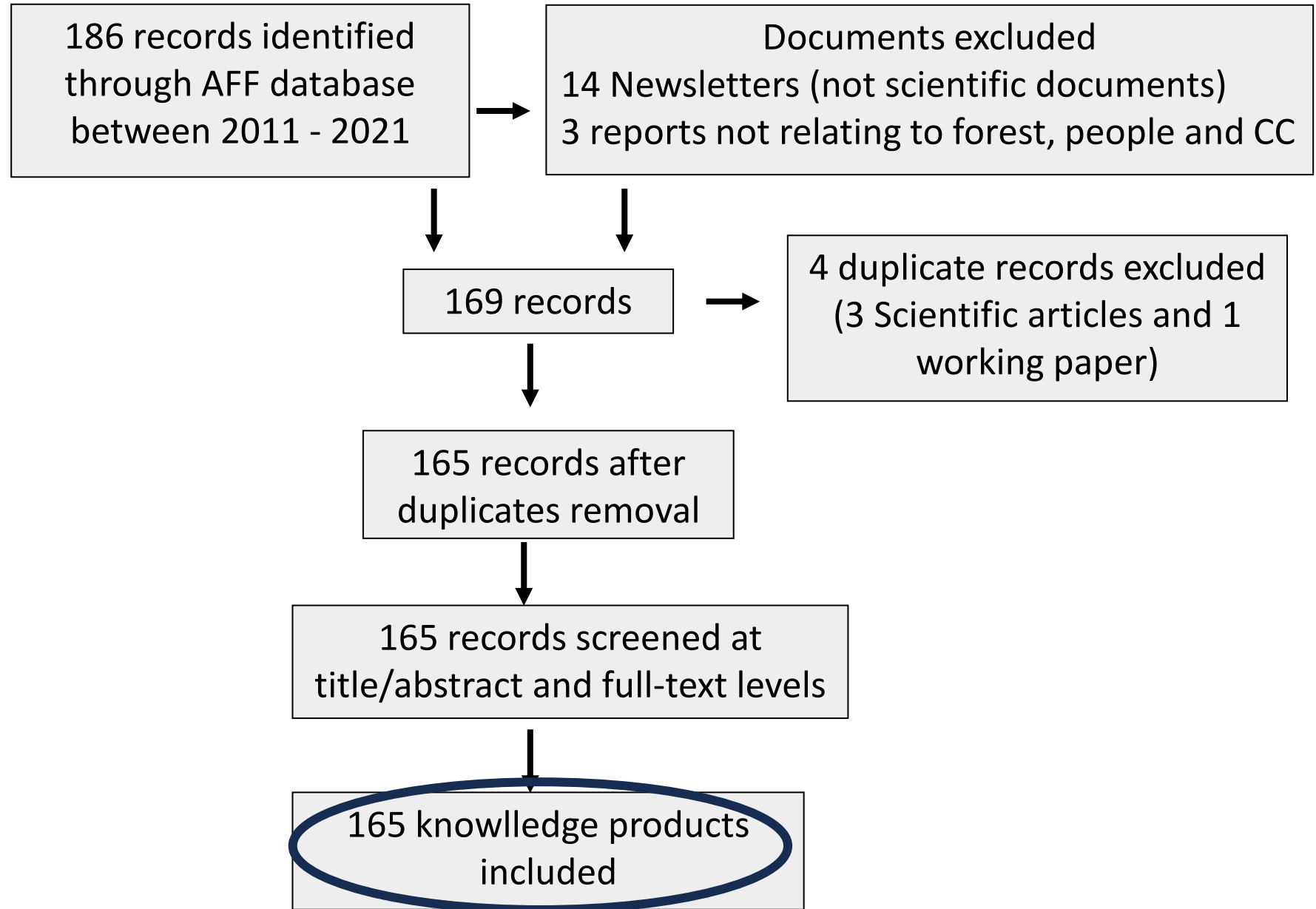




Table : Type of documents per year of the KP

| | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | Total |
|---------------------------|------|------|------|------|------|------|------|------|------|------|------|-------|
| Book | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 5 |
| Compendium | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 9 |
| Factsheet | 2 | 2 | 0 | 0 | 0 | 3 | 0 | 0 | 1 | 0 | 0 | 8 |
| Policy brief | 5 | 5 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 12 |
| Proceeding | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Report | 3 | 0 | 1 | 1 | 1 | 4 | 2 | 2 | 5 | 0 | 1 | 20 |
| Scientific article | 0 | 1 | 0 | 0 | 12 | 5 | 14 | 5 | 10 | 1 | 3 | 51 |
| Training module | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 2 |
| Working paper | 17 | 0 | 0 | 21 | 1 | 0 | 12 | 2 | 4 | 0 | 0 | 57 |
| Total | 29 | 8 | 1 | 23 | 16 | 15 | 29 | 9 | 30 | 1 | 4 | 165 |



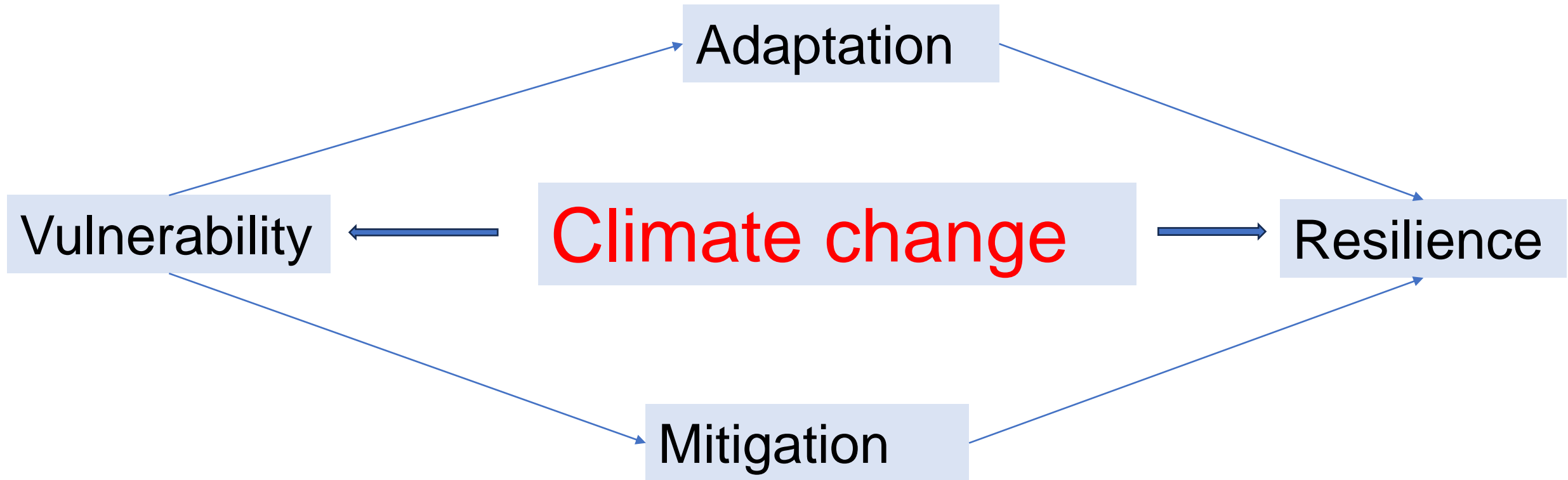


Table : Type of documents per main thematic area of the KP

| | Forest and climate change mitigation | Forest and climate change adaptation | Forest, people and livelihoods in the context climate change | Crosscutting issues | Forest, and tree-based integrated climate change mitigation and adaptation | Number of documents |
|----------------------------------|--------------------------------------|--------------------------------------|--|---------------------|--|---------------------|
| Book | | 1 | 3 | | 1 | 5 |
| Compendium | | | 3 | | 6 | 9 |
| Factsheet | 1 | 3 | 1 | 2 | 1 | 8 |
| Policy brief | 1 | 5 | 2 | 3 | 1 | 12 |
| Report | 1 | 2 | 4 | 12 | 1 | 20 |
| Scientific article | 11 | 11 | 24 | 2 | 3 | 51 |
| Training module | | | | 1 | 1 | 2 |
| Working paper | 7 | 17 | 15 | 16 | 2 | 57 |
| Proceeding (40 abstracts) | (7 abstracts) | (18 abstracts) | (11 abstracts) | (4 abstracts) | | 1 |
| Number of documents | 21 | 39 | 53 | 36 | 16 | 165 |



Key Concepts guiding AFF's work





Key Findings

- **FOREST AND CLIMATE CHANGE MITIGATION**

Key topics covered under forests and climate change mitigation in AFF' knowledge products

Carbon stock in Forests, tree-based and other land-use systems in different African landscapes with different methodologies and approaches (sample field, estimation, Specific allometric equation,), and in several forest ecosystems

Potential of African countries for carbon emissions reduction strategy and mechanisms: Biofuel, REDD+, CDM, AFOLU, INDC, VOLUNTARY CARBON MARKET, NDC , NAPA,

Green economy : Land Use, Land Use Change and Forestry (LULUCF), contribution of wood, NTFP, Payment of ecosystems services





Key Findings

FOREST AND CLIMATE CHANGE MITIGATION

Studies documented that moist forests, mangroves, savannahs, woodland forests, plantations, agroforestry systems have different carbon sequestration capacities attributable to

Species, tree diameter, tree age, tree density, slope of the sites, land use change, and ecological conditions (Mensah et al., 2016a; Oeba et al., 2016).

AFF did recommendations in the KP

In this context, AFF actually developed training modules and trained more than 600 African forestry stakeholders on rapid carbon appraisal





Key Findings

FOREST AND CLIMATE CHANGE MITIGATION

*Carbone emissions reduction
strategy and mechanisms*

- Biofuel

Jatropha.

cassava

sugar cane

Optimal and sustainable management measures were needed for the production of biofuels from jatropha (Popoola et al., 2015)





FOREST AND CLIMATE CHANGE MITIGATION

Carbone emissions reduction strategy and mechanisms:

AFF's work has made it possible to issue
Several recommendations on institutional and
regulatory frameworks, for improving forest
governance and adapting policies to make
REDD+ workable

Key Findings

- REDD+

An assessment of REDD+ implementation by
AFF in 44 African countries





Key Findings

FOREST AND CLIMATE CHANGE MITIGATION

Carbone emissions reduction strategy and mechanisms:

- Green Economy

An economic system that focuses on sustainable development, resource efficiency, and environmental responsibility

AFF knowledges products focus mainly on the recommendations to strengthen policy reforms and knowledge and technology transfer to enhance the contribution of the forestry sector to the green economy (Kitula, 2014; Vodouhe and Assogbadjo, 2019)





Key Findings and Discussion

FOREST AND CLIMATE CHANGE MITIGATION

*Areas where further
investment is needed*

- Explore all resources related to the forest and trees that can contribute to biofuel such as residues
- Explore the potential of urban forests in mitigating climate change





Key Findings

- **FOREST AND CLIMATE CHANGE ADAPTATION**

Key topics covered under forests and climate change adaptation in AFF' knowledge products

Forest and trees helping adapt to disaster risk

The knowledge product documented that forest and tree systems played an important role in reducing disaster risk: floods and drought, improving water quality and other vital environmental services. Specifically, reforestation and sustainable forest management have helped protect land from the adverse effects

Sustainable management of degraded sites and threatened species, land use, use of resistant alternative species,

Adaptation of forests to climate change: Improvement of genetic material and control of diseases and pests for forest restoration,





Key Findings and Discussion

FOREST AND CLIMATE CHANGE ADAPTATION

*Areas where further
investment is needed*

- Several AFF studies have documented local innovations in climate change adaptation strategies. They should be ranked in order of priority.
- and initiate research for the participatory development of these innovations for scaling up or influence policies in the development of these innovations





Key Findings

FOREST, PEOPLE AND LIVELIHOODS IN THE CONTEXT OF CLIMATE CHANGE

- AFF has undertaken enormous studies on NTFPs and timber from African forests, their use, their contribution to the economy, their importance.
- several recommendations have been made for a sustainable use of these resources in the context of climate change such as the domestication of species with multiple uses of value for the population, the literacy of the population, the development of added value to products from forests and other services





Key Findings

FOREST, PEOPLE AND LIVELIHOODS IN THE CONTEXT OF CLIMATE CHANGE

- Recommendations for future studies are the implementation of these recommendations, practical trainings on the domestication of these valuable resources and their production at scale, the practical creation of added value to these products through participatory methods of innovation for local empowerment and a sustainable green economy.





Key Findings

FOREST, PEOPLE AND LIVELIHOODS IN THE CONTEXT OF CLIMATE CHANGE

- Otherwise, AFF's knowledge products have relied primarily on marketable forest products. The other non-marketable factors of forests and trees outside the forest must be evaluated in terms of payment for ecosystem services such as pastures in natural areas.





CROSSCUTTING

Key findings

- The documents produced cover forest law and governance in climate change context, private-public partnerships on forestry resources, gender issues, capacity building, forestry associations issues, forest certification, training modules.

Having noticed Variations in forestry education / training contents from country to country and even within countries and also lack of some important forestry topics in the curricula



AFF embarked to produce Training materials and organise many regional capacity building events for African forestry stakeholders





In general, AFF's knowledge products show that **African forest economy needs to be improved**

Conclusion

- Between 2011 and 2021, AFF produced nearly 200 knowledge products including books, compendia, policy briefs, factsheets, reports, scientific articles, training modules, working papers, proceedings divided into 4 main themes: Forest and climate change mitigation; Forest and climate change adaptation; Forest, people and livelihoods in climate change context and production that are crosscutting.
- The knowledge products cover the different sub-regions of Africa and different forest type: woodlands and savannahs, mangrove forest, tropical moist forest, dry forests, Afromontane highlands, etc.
- The ecosystem services provided by these African forests enable the protection of biodiversity and provide of livelihoods. Faced with climate change and human pressure on forests, the services provided by these forests are compromised, leading to a threat to the survival of populations, the disappearance of biodiversity, social inequalities and poverty.





In general, AFF's knowledge products show that **African forest economy needs to be improved**

Conclusion

- Africa derives two-thirds of its forest value from primary forest activities, such as logging, NTFP collection and firewood collection.
- For meaningful and sustainable production of jobs in the forest sector the traditional conservative view of African forests must change (AFF, 2015).
- The African forest challenge involves the Structural transformation of Africa with targeted investments in green innovations and diversified productive systems, better targeting of green climate funds.





African forest economy needs to be improved

Recommendations

- In perspective A method for monitoring the evolution of forestry activities in the different regions over a long period (several decades) must be considered.
- It is necessary to set up a permanent monitoring system over several years or even decades to produce scenarios and models for the development of activities and the forest market in order to arrive at innovative solutions
- For example, data of the evolution of trade in forest products at the national and regional level, the carbon market, the creation of value added to forest products must be recorded and monitored over several years for better decision-making



Acknowledgements

THANK YOU

