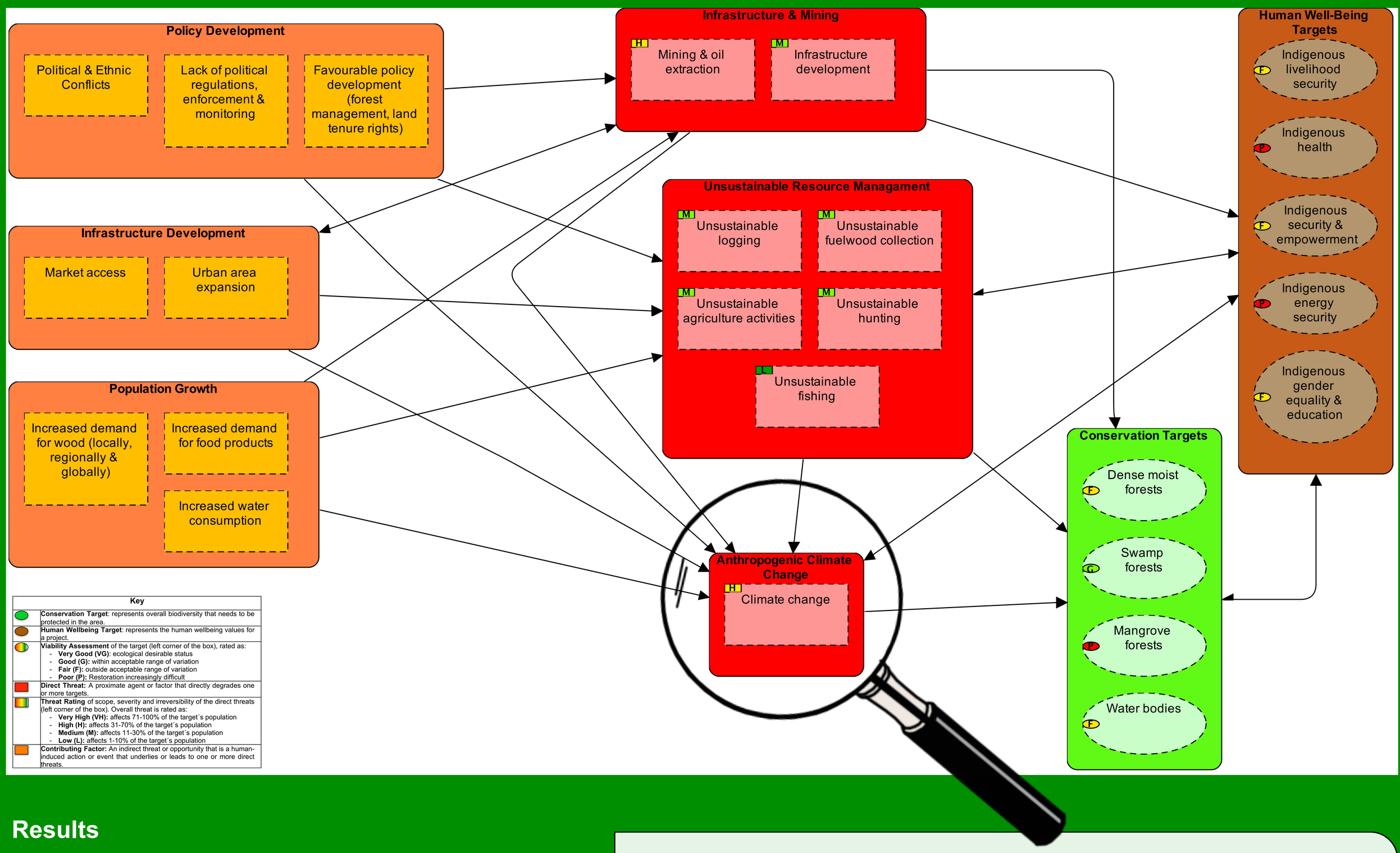
Participatory Forest Management in the Congo Basin:

A Way for Climate Change Adaptation and Sustainable Development?

The Open Standards
FOR THE PRACTICE OF CONSERVATION

The Congo Basin forests cover more than 2 million km² in the Central African countries of Cameroon, Congo, Gabon, Burundi, Central African Republic, Equatorial Guinea, Republic Democratic of Congo and Rwanda. The forests provide essential ecosystem services for local populations and thus need to be protected for this and following generations.[1] In order to systematically detect existing and future vulnerability of the Congo Basin forests, the Open Standards for Practice of Conservation and the belonging MIRADI software have been used. The Open Standards are an open-source framework, developed by the Conservation Measures Partnership (CMP) through public collaboration. It provides a method to make informed, quality management decisions for conservation projects.[2]



Results

The ecosystem analysis showed that climate change is a direct and high-rated threat, that is likely to increase future vulnerability of the forest ecosystem and the indigenous population living in the forest.

At the same time, analyzed case studies from the Central African region showed, that Participatory Forest Management (PFM) can decrease vulnerabilities of the forest ecosystem and the indigenous population.

Thus, PFM can offer a strategy that can help to adapt to negative climate change effects, while promoting sustainable development. Nevertheless, further research is needed.

Climate Change Impacts

- **Changes in temperature** (increasing average near surface temperature between +1.5 to +6 °C, more temperature extremes), **precipitation patterns** (± 30% annual total precipitation, +30% increase of heavy rainfall events, increasing frequency of droughts) **and ecosystem services provided.**[3]

Participatory Forest Management

- **Benefit-sharing approach**[4]: PFM can legalize the access to timber and non-timber forest products (NTFP), such as water, food and medicine for indigenous populations. Thus, they can prepare better for negative climate change impacts and implement “safety-nets”.
- **Power-sharing approach**[4]: PFM legislations can empower indigenous populations to protect forest ecosystems as “eco-guards”. This helps to protect forest connectivity and biodiversity, which helps to reduce the magnitude of negative impacts of climate change for the ecosystem.

Further Research

- How can the impact of PFM as a climate change adaptation tool be quantified?
- How financially efficient is PFM as an adaptation tool?
- How can PFM be integrated into the post-2015 development agenda?

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References: **1**: COMIFAC, C. A. F. C. (2013). The Forest of the Congo Basin: State of the Forest 2013, OFAC: Observatoire des Forêts dÁfrique Centrale. **2**: http://cmp-openstandards.org/ **3**: Climate Service Centre (2013). Climate Change Scenarios for the CongoBasin. [Haensler A., Jacob D., Kabat P., Ludwig F. (eds.)]. Climate Service Centre Report No. 11. **4**: Wily, Liz Alden (2002). Participatory Forest Management in Africa: an Overview of Progress and Issues (pp. 31-58), in Second International Workshop on Participatory Forestry in Africa, FAO (Publ.).