

## Morocco – Prioritizing NAMAs in the agriculture sector using Multi-Criteria Analysis

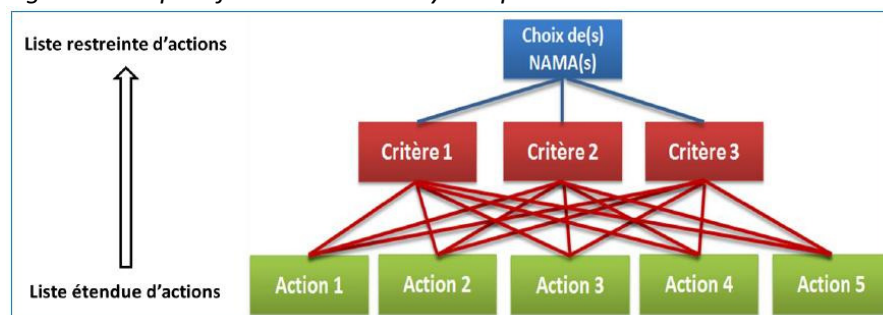
Morocco made important steps towards identifying NAMAs in the agriculture sector by using Multi-Criteria Analysis under the LECB programme. The analysis for a shortlist of 3 selected NAMAs directly feeds into the ‘Green Morocco Plan’ (Plan Maroc Vert). The work was conducted on behalf of the Ministry Delegate to the Minister of Energy, Mines, Water and Marine Fisheries in collaboration with national experts and completed in August 2014. In a series of steps first a long-list, then a short-list of potential NAMAs was developed, aspects considered include mitigation potential and costs, beneficiaries and co-benefits, participating parties, as well as their MRV approach.

As a decision-support tool to prioritize pre-identified NAMAs Multi-Criteria Analysis was used. Three main criteria were identified, which were further subdivided:

- Criterion ‘Environmental benefit’ (weight 45%): Sub-criteria: Mitigation potential (60%), Synergy with adaptation (40%)
- Criterion ‘Socio-economic benefit’ (weight 35%): Sub-criteria: Benefit for development (40%), Contribution to food security (35%), Insertion into the Green Morocco Plan (25%)
- Criterion ‘Ease of implementation’ (weight 20%): Sub-criteria: Technical feasibility (40%), Social acceptability (30%), MRV complexity (20%), Integration into the market (10%).

Each criterion was attributed a specific weight related to its importance by an Inter-Ministerial Monitoring Committee. In comparison matrixes pairs of criteria are then evaluated against each other. Morocco chose to use the PriEST open source software for this, which is being used in various sectors such as health, transport, telecommunications and political decision making.

Figure: Example of hierarchical analytical process



The three priority NAMAs that were identified by this analysis are: 1. ‘Promotion of arganiculture’, entailing the cultivation of argan tree orchards for the production of argan oil, 2. ‘Restructuring the agricultural landscape’, which includes the planting of various tree species around and within agricultural parcels, as well as 3. ‘Conservation agriculture’, encompassing the expansion of conservation agriculture for growing cereals.

In addition to their high potential for carbon sequestration, these actions contribute significantly to adaptation to climate change, sustainable development and the country's food security. They also aim to improve the living conditions of farmers and ranchers and are embedded into activities implemented or planned under the Green Morocco Plan.

It is envisaged that similar processes will be pursued also for the further two selected work areas waste and housing, therefore paving the way towards low carbon development in Morocco.



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