



Smallholders Forest Carbon Development in the Philippines

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ADDRESSING CLIMATE CHANGE ISSUES AND FOREST CARBON DEVELOPMENT IN THE PHILIPPINES

Addressing climate change issues is viewed not only causing additional economic burdens, but also a critical factor in determining the country's survival as a nation. The impact on the agriculture and forestry sectors and on the water and land resources burdens the country, which is already dealing with a host of socio-economic and environmental problems.

To address climate change issues, the role of forests in sequestering carbon is one of the land-based opportunities to undertake mitigation measures.

The emerging carbon market (thru the CDM, VCM and REDD+ mechanisms) is seen as an opportunity for developing countries like the Philippines, to get support to -

- rehabilitate its denuded forests and degraded lands,
- implement sustainable measures on the use and management of its natural resources and
- address poverty issues.

But for smallholders, who are a majority in the Philippines, it remains a challenge to be able to participate in carbon markets and benefit from them through payment for environmental services (PES) mechanisms.

The case study assessment is conducted to find out the constraints hindering the full implementation of carbon forestry projects in the Philippines, be it for CDM or VCM. This is also to assess the potential and constraints of REDD+ in the Philippines.

Small landholdings (owned or claimed with or without land tenure instruments) are common in the Philippines.

POTENTIALS OF PHILIPPINES' FOREST CARBON DEVELOPMENT FOR CARBON MARKETS AND OTHER PES MECHANISMS

Total land area in the Philippines is 30 million has. Classified as

- Forestland/timberland = 53%; forest cover within = 90%
- Alienable and Disposal (A&D) lands = 47%; forest cover within = 10%

As of 2003, only 7.2 million has with forest cover. Only 36% of which is categorized as closed forest, 56% as open forest, 5% as plantation, and 3% as mangrove.

There are about 2 million ha of lands that need rehabilitation. These are the potential areas for forest carbon development. Rehabilitating denuded forests & degraded lands would mean contributing to the mitigation effort while undertaking adaptation measures. The forest increase of 47 000 ha⁻¹ from 1988 to 2003 indicates the potential of the Philippines to contribute to the mitigation effort.

PROJECT CASE SITE STUDY ASSESSMENT

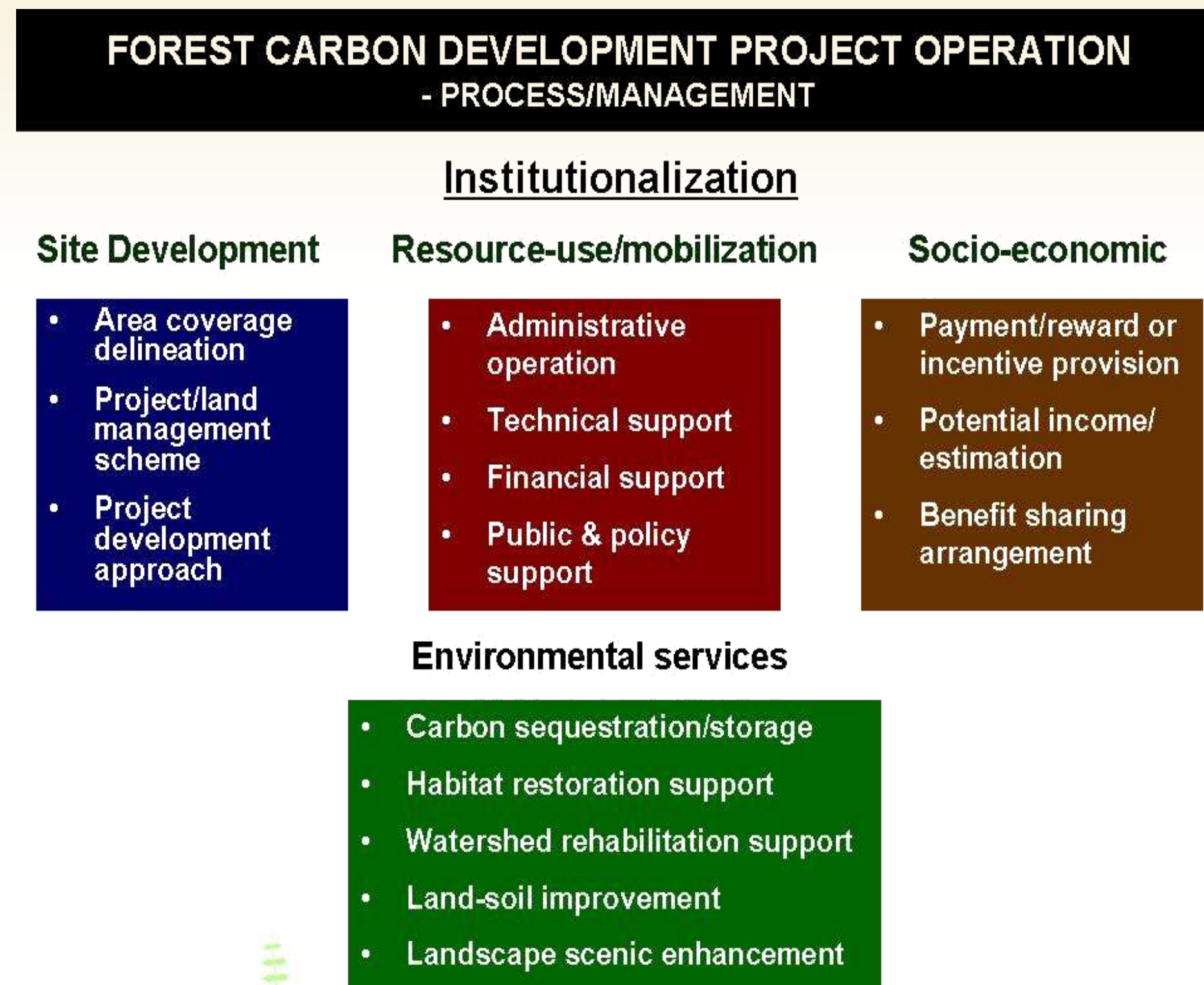


Figure 3. Focus of the assessment of project operational plan and project site activity implementation

Forest carbon development by 'agroforestation' is one of the ways by which optimal economic and environmental services can be achieved. This can be accomplished by promoting a purely forest-tree system and/or agroforestry tree system, or the integration of 'working trees' in agricultural cultivated landscapes.

The challenge of forest carbon development on denuded 'forest frontiers' is the re-vegetation of the area purely with indigenous, native/endemic tree species applying the 'rainforestation strategy, especially in biodiversity hotspots and critical watershed areas. The agroforestry system strategy is most likely the option to be adopted in the 'forest-agricultural mosaic' and 'agricultural lowlands'.

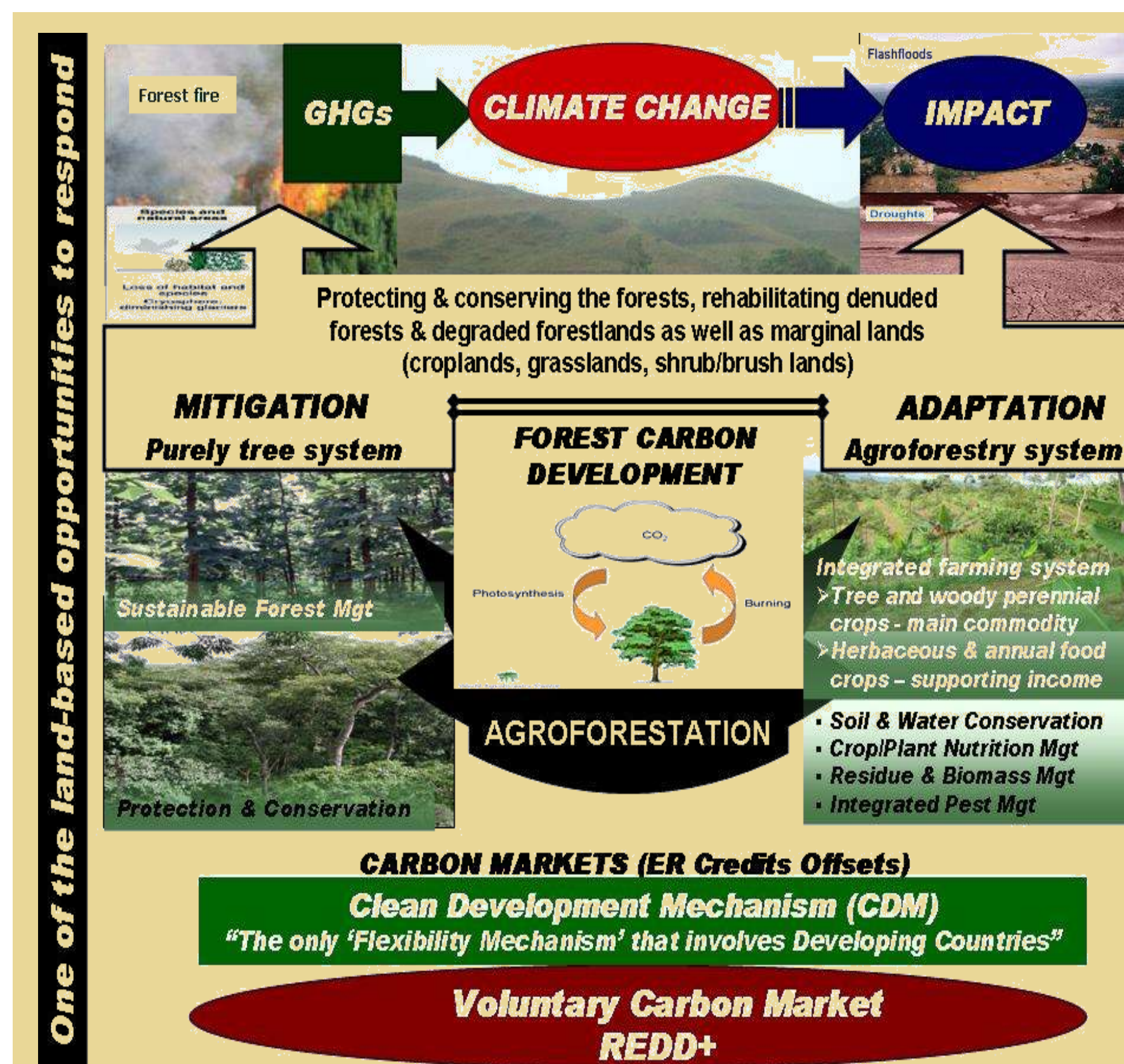


Figure 1. Rationale of forest carbon development ('agroforestation' scheme) in relation to addressing climate change issues, and tapping the carbon market as payment mechanism for environmental services

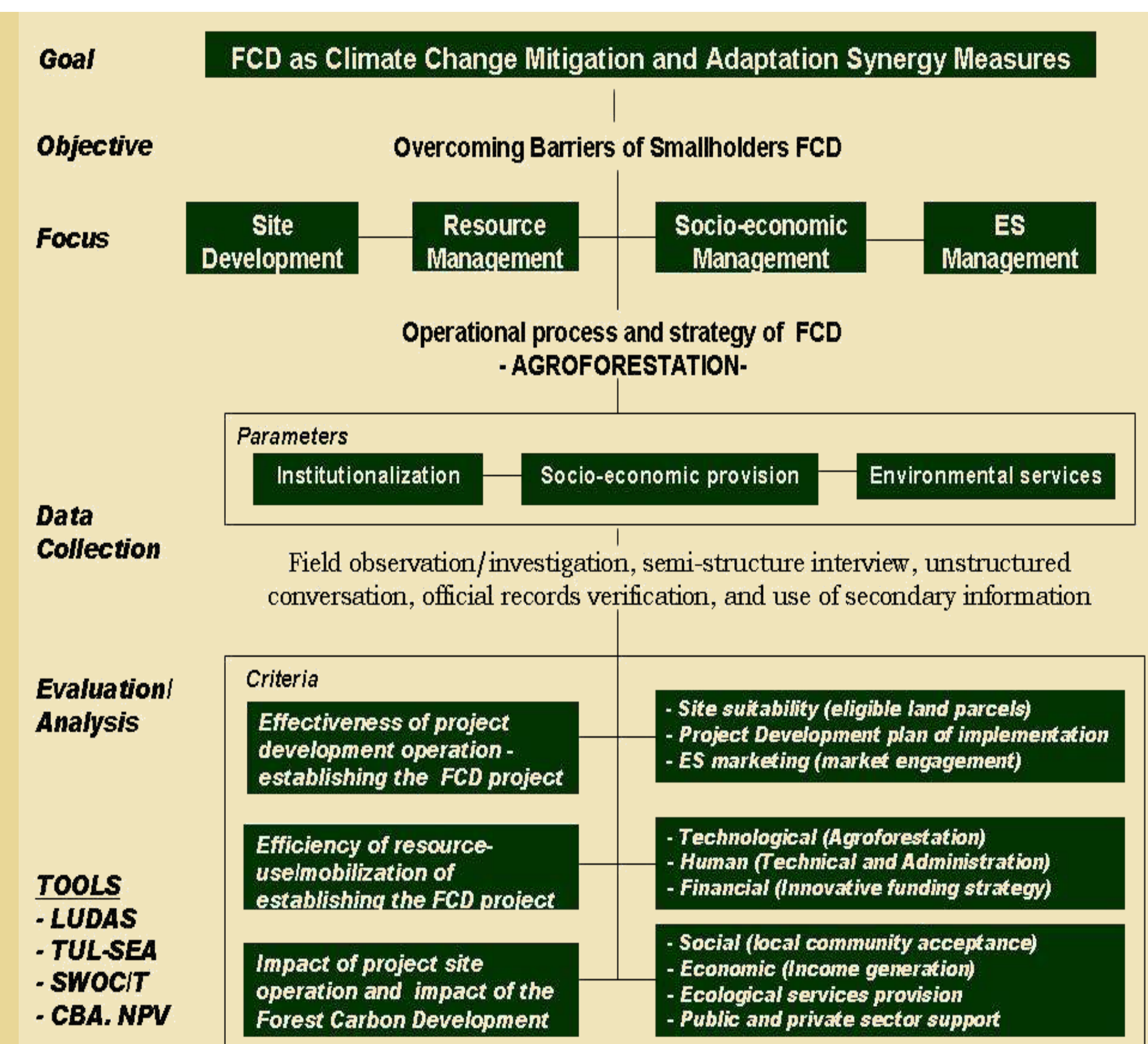


Figure 2. Proposed framework to serve as guide for the carbon forestry project development

KEY FACTORS FOR CONSIDERATION IN THE FOREST CARBON DEVELOPMENT OPERATION

- Site Development**
Pre-requisite should be the availability of land-cover and land-use maps of the entire management site/area coverage.
- Resource-use/mobilization**
Inventory and mobilization of social/human capital. The main stakeholders, particularly the involvement of smallholders who depend on natural resources, the settlers/claimants of the land needing rehabilitation and whose land has been identified as eligible for the forest carbon project development.
- Socio-economic provision**
To instill a sense of ownership and to ensure small landholders' acceptance of the project strategy and land management scheme, their involvement in the planning, technical and socio-economic aspects of the project should be clear from the start. The provision of land tenure instruments to the land settlers/claimants who are cooperators is vital in the forest project development.
- Environmental services**
Technical capability to conduct baseline measurements, carbon potential estimation, measurements and valuation of its co-benefits. This also includes economic benefits that can be derived from the project as well as the co-ecological services that can be provided.

In the institutionalization of the forest carbon project, the role of the local intermediary entity as the project proponent (be it a government entity, an NGO or private organization) is vital. Project operation requires the proponents' resource mobilization capacity and capability. It is important that the proponent should have appropriate technical knowledge of the rules, guidelines and standards required for the carbon markets and other PES mechanisms.

KEY CONCERNS OF LOCAL INTERMEDIARY ENTITY AS PROJECT PROPONENT IN BUNDLING SMALLHOLDERS FOREST CARBON DEVELOPMENT

- Ensuring project site suitability, area/parcel eligibility, and project development/operational plan feasibility.
- Enjoining the cooperation of direct stakeholders, particularly the active involvement of land settlers/claimants of the land covered or to be included in the project development.
- Financing the operation from project plan formulation and design document preparation following a standard template, and the actual implementation.
- Following the registration process for the carbon market, including evaluation and endorsement from DNA and validation from DOE.
- Implementation of the project according to the validated /approved project design.
- Ensuring maintenance and protection, including monitoring, reporting and verification.

Overall, forest carbon projects needs supportive policies locally (from barangay to municipal & provincial level) nationally and internationally, especially on setting up the rules, methodologies and standards of project development operation that are adoptable at the local level.

ACTIONS NEEDED FOR FOREST CARBON DEVELOPMENT PROJECT OPERATION

- Capacity building that focuses on institutionalizing the project operation. This includes the technical and administrative concerns of the project operation, development planning and documentation.
- The enabling policies needed to support the operations, capitalizing on the forest carbon development strategy to rehabilitate deforested areas and other marginal lands, especially in those landscapes where ecological functions are affected and environmental services critically threatened.
- Research on the optimal land management practices in adopting various 'agroforestation' schemes. Assessing the economies of scale at site-specific level for feasible project development with direct involvement of the smallholders' group in market engagement.
- Cost-effective carbon potential estimation and actual measurement, monitoring and verification, including valuation and analysis of the co-ecological benefits of forest carbon development.

Aside from carbon sequestration, forest carbon development targets other environmental concerns such as habitat restoration, watershed rehabilitation, land and soil quality improvement, and enhancement of scenic beauty of the landscape.