

CDM Environmental Forestation Fund (Green Fund)

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Abstract

SRIL is planning to set up carbon fund specializing to the sink CDM in Vietnam. The fund's provides Vietnamese participants with plantation and maintenance costs in order to receive CER through Clean Development Mechanism. Acacia family, fast growing tree, is considered to be planted for meeting purposes ;

The fund is to receive maximum CER. Forestation on the protection (watershed) area is an urgent needs of Vietnamese Government. Though Acacia is not in the category of prohibited potential invasive alien species, Acacia is alien species. We understand this fact is showing conflict between CDM and concept of Bio-Diversity. The fund will leave forests to Vietnamese Government after the project period then, we hope, the forest trees will be replaced by domestic trees in order to restore original vegetation / ecosystem as of 1940s

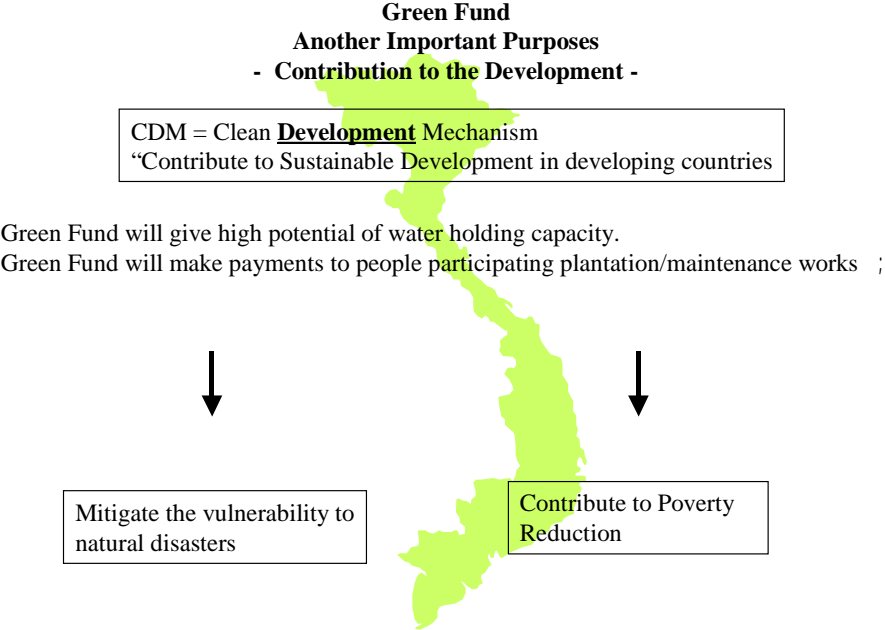


Green Fund

Crediting Period	10-20 Years	
Area :	70,000ha	
Region :	10 provinces (7,000ha each)	
Implementation : (Tentative)	Land Labor Technical Support Contractor Cash Management	People's Committee (Province) People's Committee (District) Forest Enterprises DARD SPC to be set up by the Fund
Contracts :	Among the Fund, MARD and People's Committee Terms & Conditions of various matters including ; Process on plantation Payments CER transfer	
CERs & Cost	In total 7years from 70,000ha ; 10 Million t-CO ₂ (MAI = 14) $14(m^3) \times 1.7 \times 0.5 \times 0.5 \times 44/12 \times 7(y) \times 70,000(ha)$ = <u>10,690,166</u> (t-CO ₂ / 7y)	

Presentation Contents

Green Fund is under designation by SRIL. The purpose of the fund is to obtain certified emission reduction (CER), as a result of reforestation, from Vietnamese parties through CDM. The fund will not purchase CER upon it will be come up but will pay costs relating to forestation and maintenance work on demand basis and later period the fund will receive CER without payment. In other words, advance payment basis or “investment”. Duration of the fund

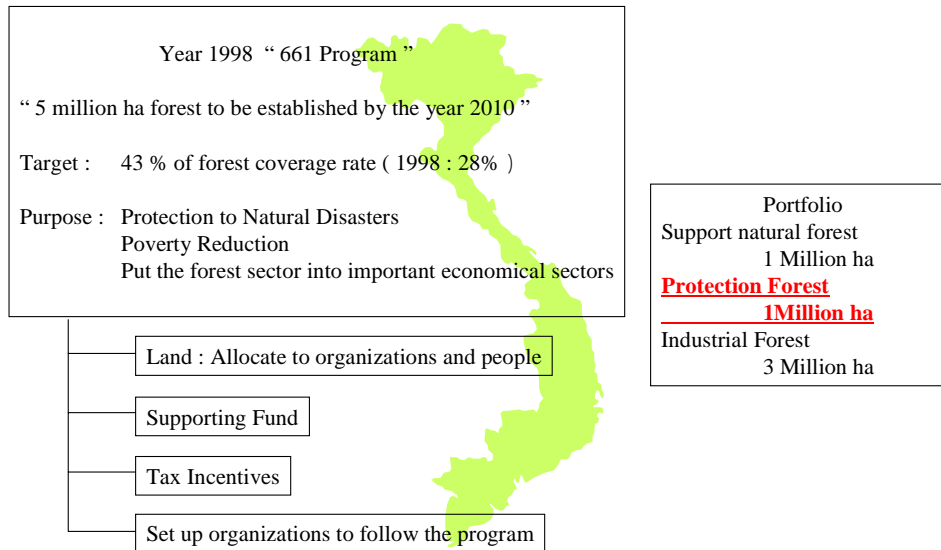


will be around 10-20 years. Back ground of the fund is strong needs of Japanese enterprises, who would like to secure emission right in order to prepare future changes in laws in Japan as well as strong needs of Vietnamese government to promote reforestation. The plantation, supported by the fund, will be made at abandoned barelands. The abandoned barelands has been formulated by bombing attacks during wars as well as illegal cutting for fuel. The abandoned barelands are covered by annual grasses and short height bushes. It is granted that the current vegetation is climax phase.

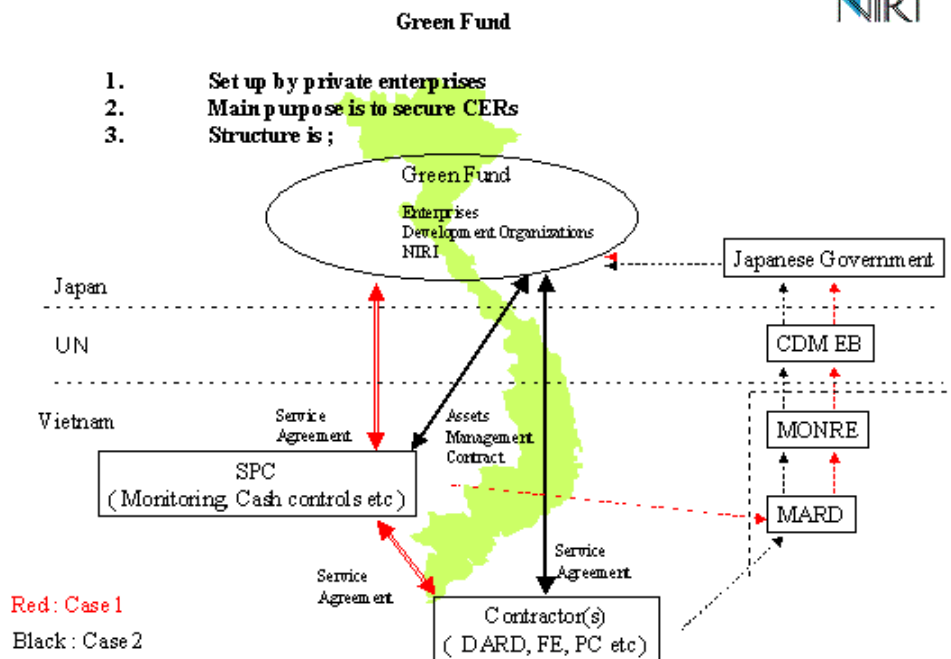
The sub-theme of the fund is the contribution to the sustainable development of Vietnam.

- i) The reforestation work place will be categorized as protection forest area, which contribute to mitigate vulnerability to natural disasters at water shed areas. Due to the lowered water holding capacity in upstream areas, some down stream areas are attacked by floods every rainy seasons.
- ii) MARD and the fund has been discussing on the area to be reforested. Not only enlarging water holding capacity but also helping poverty reduction of indigenous people living in mountainous areas through payments on plantation works and maintenance works. Also the fund will take into account of setting agro-forestry arrangement to some extent.

**Vietnam National Program
- 500 Million ha Reforestation -**

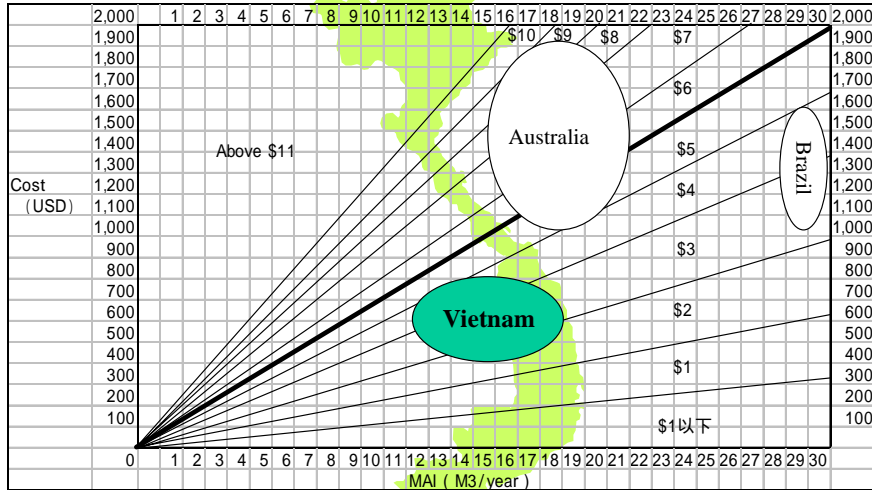


Vietnamese government has " National 5million ha reforestation program ", which is aiming to reach 43% forest coverage over the national land by 2010. In order to reach the target, the government established new organization, changed land property system, started tax incentives and so on. The 5million ha consists of 1million ha of the supporting restoration of natural forest, 1million ha of establishment of protection forest and 3million ha of establishment of industrial forest. Though the fund will proceed reforestation work apart from the program due to the reason of additionality issue, the fund will follow the concept of the program.



Cost Performance

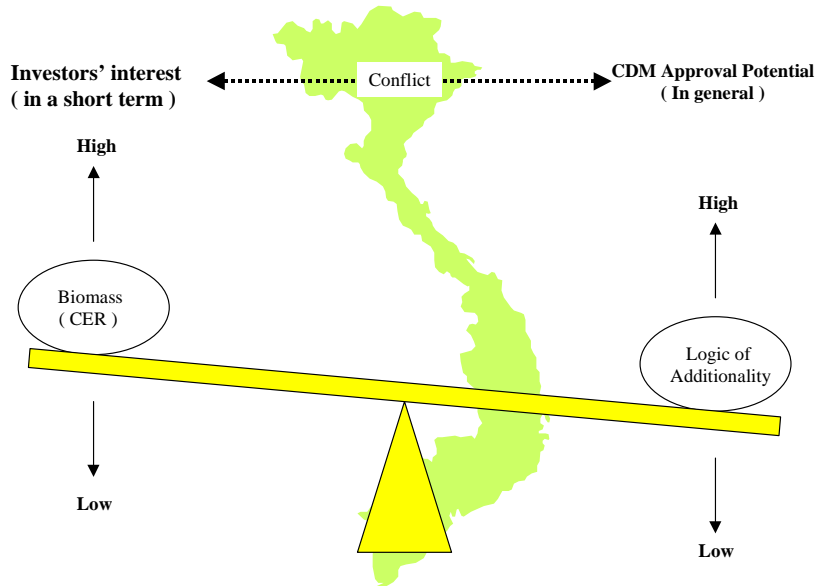
Comparison : After 7 years from the plantation (Expansion ratio 1.7)
 (- Not include profit from selling logs -)



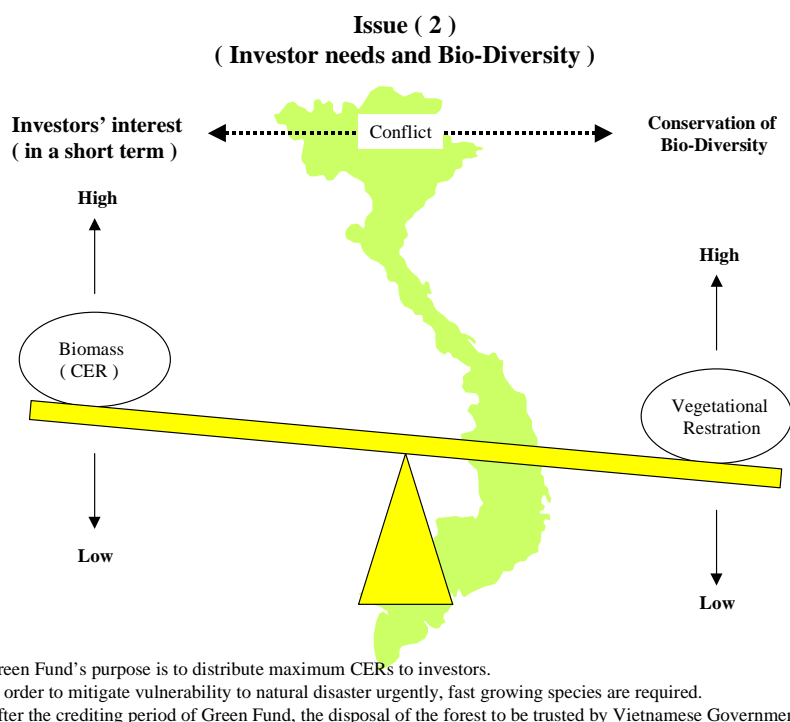
Carbon Sink : $\text{MAI}(\text{M3/ha/y}) \times \text{Expansion Ratio} \times \text{Density}(0.45\text{-}0.65) \times \text{Carbon Contents}(0.5) \times 44/12$

The fund will be established in Japan, under the laws in Japan. The main agreement to stipulate both parties rights and obligations will concluded by the fund and Vietnamese participant (s) . The graph showing the comparison of the cost and quantity of carbon sequestration (return) among 3 countries. Though Vietnam is not so attractive in terms of the accumulation of biomass (in 7 years), cost performance is attractive due to the reason of low labor cost. The figures are

Issues (Needs and Additionality)



Green Fund will contribute to the Vietnamese rural development and reforestation will be made on bare lands.
 In addition, we would stress, it is not so easy to find out fertilized and abandoned bare land ...



from NIRI's own data and utilize expansion ratio 1.7 (total figure is consisting of above-ground and below-ground biomass).

The conflict between investors' interest and additionality is shown in the graph. Also the difficulty in the finding out suitable land should be noted.

The conflict between investors' interest and bio-diversity is shown in the graph. The purpose of the fund is to distribute maximum CERs to investors so that acacia species, widely accepted in Vietnam as fast growing species, will be selected as main species. From the view point of bio-diversity, the fund's selection and work will contain, mainly, blow mentioned 2 issues.

- i) acacia mangium, auriculiformis and hybrid are imported species,
- ii) Near to the mono-culture

To arrange vegetation as it was in 1940 is taking time to survey and raising cost so that it was not considered by the fund and also from the standing point of the urgent needs of Vietnamese government, the fund's selection of species is limited. The fund is not perpetual. Though the decision of the disposal of the forest after the leaving of the fund to be trusted to Vietnamese government, the fund hopes the forest should be replaced by domestic species gradually. The fund will make not only forests but also rich soils that is preparation for future generation.