



International Conference on Sustainable Mangrove Ecosystems

18-21 April 2017, Bali, Indonesia

Payment for Forest Environmental Services in mangrove of Ca Mau Province, Viet Nam

Vien Ngoc Nam

•Nong Lam University, Ho Chi Minh City, Viet Nam

*E-mail: drvnam@gmail.com

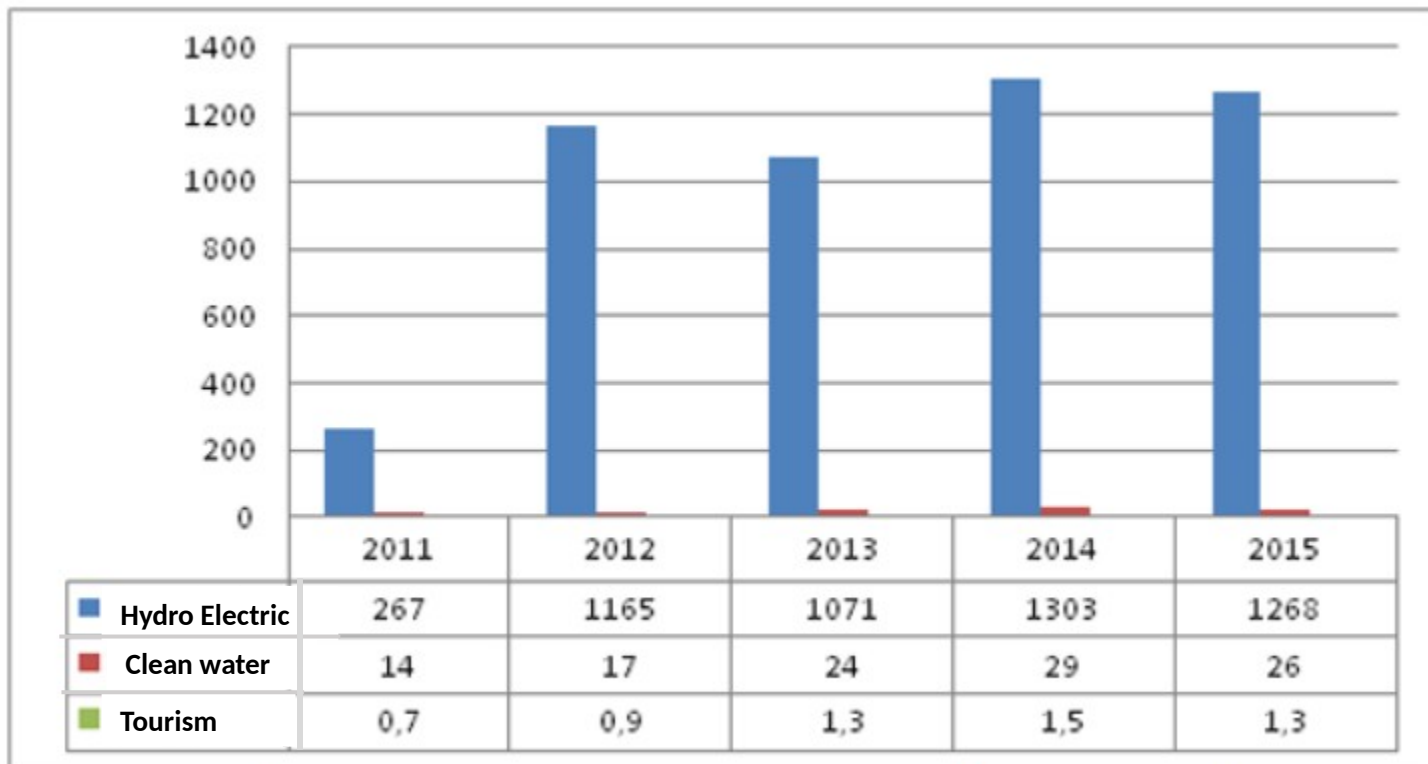
(Payment for Environmental Services – PES)

(Payment for Forest Environmental Services – PFES)

Decree No. 99/2010 / ND-CP dated 24 September 2010 of the Government on payment for forest environment services

- Protect soil, limit erosion and sedimentation of lake, river bed, stream bed.
- Regulate and maintain water resources for production and social life.
- Carbon sequestration
- Protect the natural landscape and preserve the biodiversity of forest ecosystems for tourism services
- Providing spawning grounds, food sources and natural seedlings, using water from forests for aquaculture.

Revenues from forest environmental services through years 2011 - 2015 - Unit: VND billion

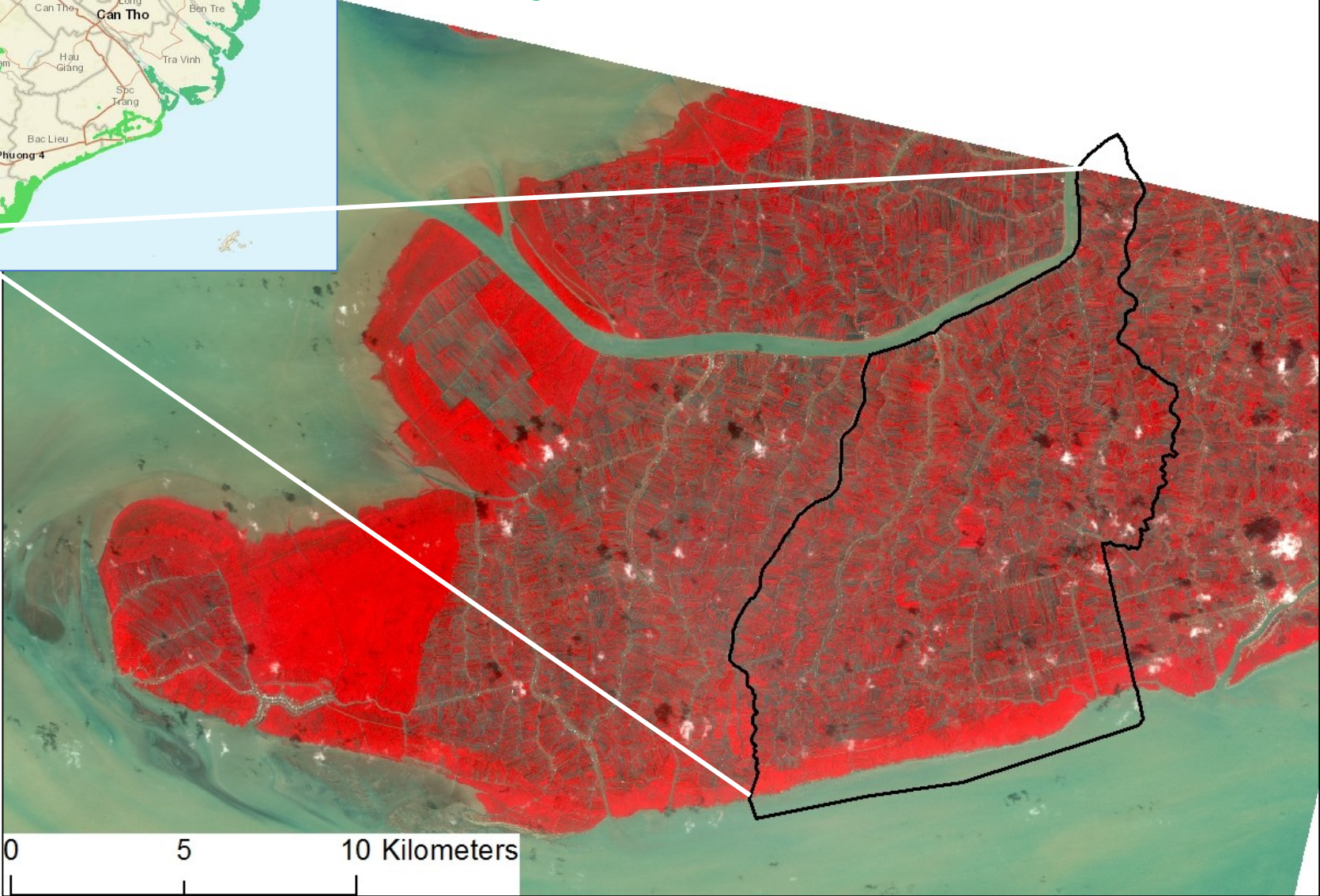
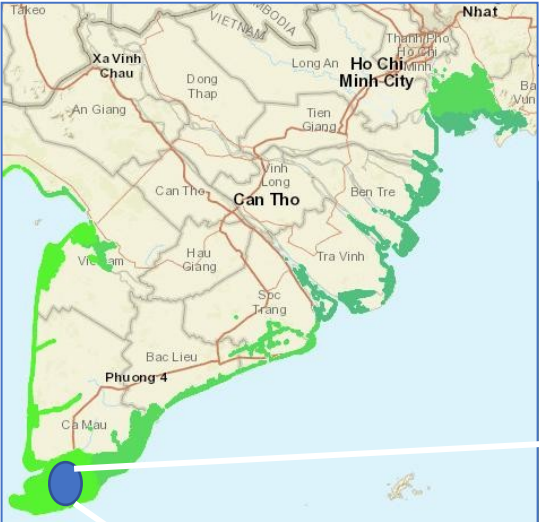


(Source: Report of the Directorate of Forestry at the Review Conference on PFES in 2015)

- The revenue from payment for forest environmental services reduces the investment budget for the forestry sector by 22-25%;
- Create additional income of about 2 million VND/household/year for over 400,000 households and 5,700 households in 41/63 provinces;
- Contribute to efforts to increase forest cover to 40.73% in 2015.



Ngoc Hien District, Ca Mau Province, Viet Nam



Shrimp Culture in Ca mau

Ca Mau has the largest area of aquaculture in the Mekong Delta (45% of total area and 35% of output), including 5 types:

- (1) Extensive farming,
- (2) Semi extensive
- (3) Shrimp-Rice,
- (4) Shrimp-Forest,
- (5) Industrial shrimp.

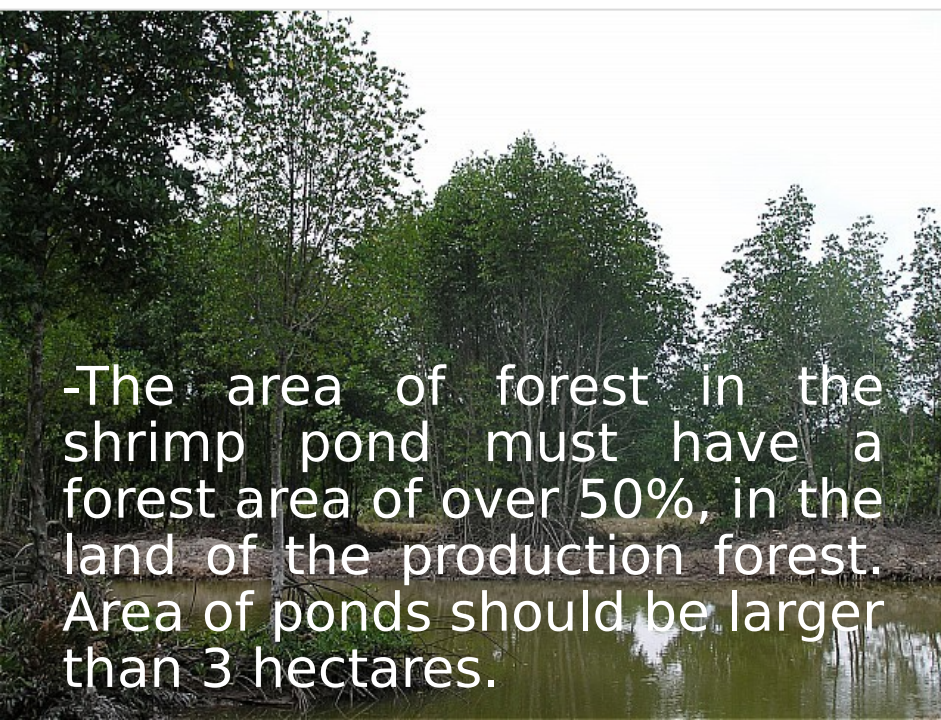


24% of the shrimp-forest area is certified ecologically by reputable organizations such as Naturalland, EU organic, Bio Suisse, ..





Silvo-fishery model



-The area of forest in the shrimp pond must have a forest area of over 50%, in the land of the production forest. Area of ponds should be larger than 3 hectares.



PFES Payment for Forest Environmental

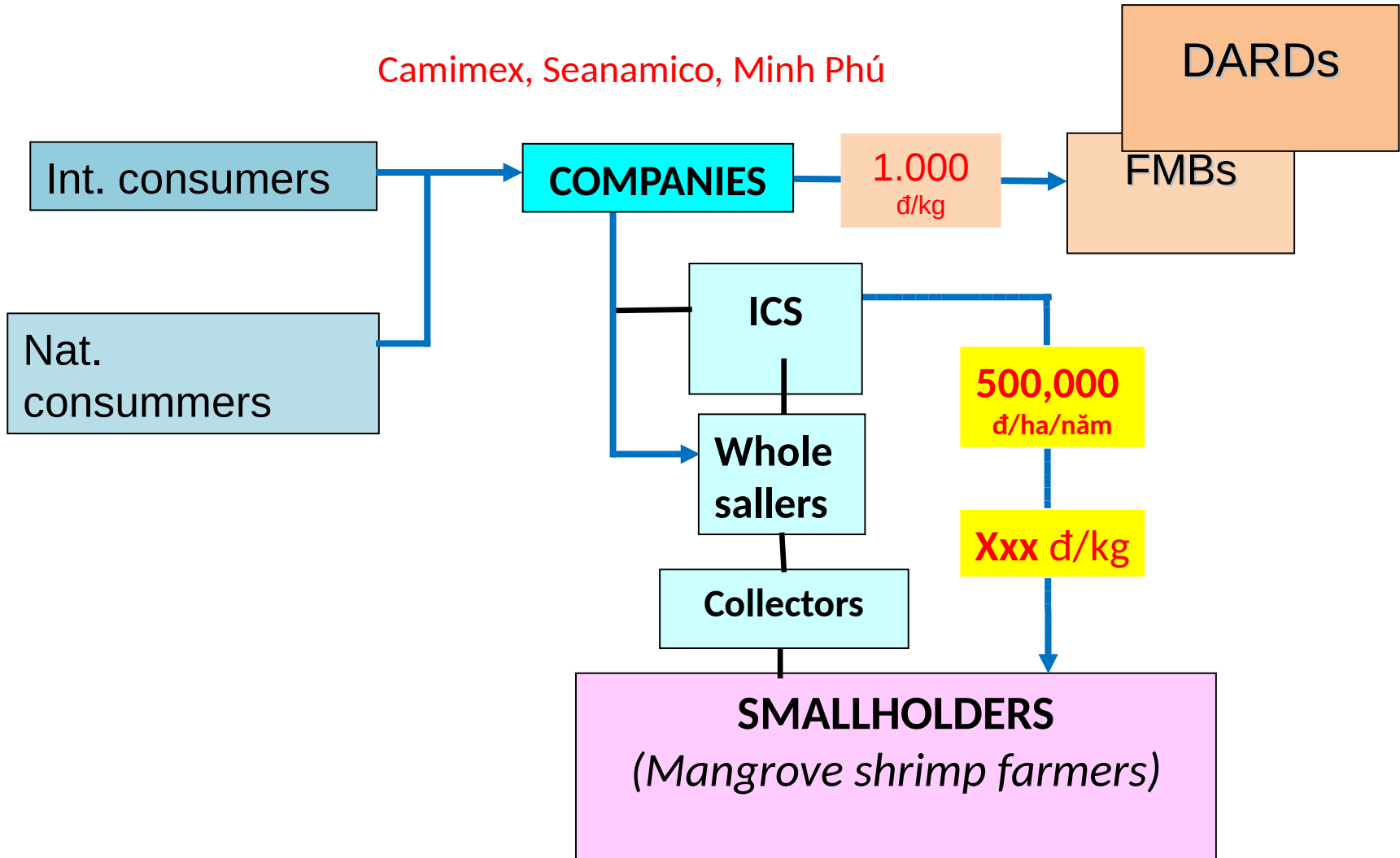
Services

- People who raise shrimp under canopy are "sellers" of ecological products and services derived from well managed forests.
- Customers of ecological shrimp, most in the US, Europe, Japan, South Korea are "buyers".
- These people have formed the International PFES system.
- This payment approach is not through a government-run organization recognized by the Ministry of Agriculture and Rural Development as part of a national policy for payment for forest environmental

PAYMENT MECHANISM

“A direct payment for pilot PFES”

Camimex, Seanamico, Minh Phú



Supporting main actors of chains

Hatchery

Shrimp
Farmers

Wholesalers
/Collectors

Processors

**Consumers/
Retailers**



Increase Forest Cover $> 50\%$ by planting

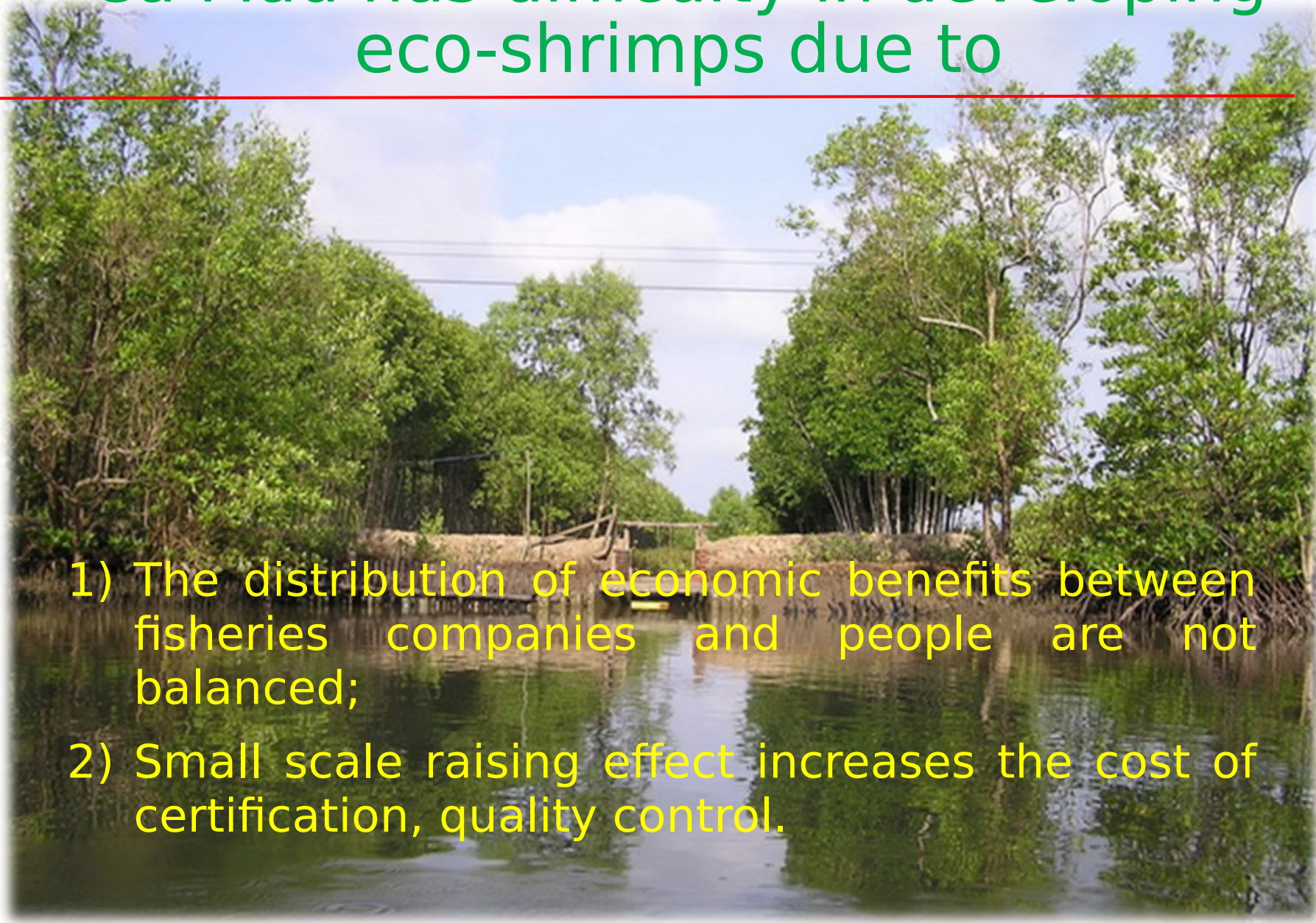


Carbon sequestration



Ca Mau has difficulty in developing eco-shrimps due to

- 1) The distribution of economic benefits between fisheries companies and people are not balanced;
- 2) Small scale raising effect increases the cost of certification, quality control.



The Ca Mau People's Committee issued Decision 111/ QD-UND dated 22 January 2016 regulating the piloting of shrimp-certified forests in Ca Mau province, of which piloting

- According to the pilot Decision, the aquaculture enterprise develops and implements the **international certified** shrimp farming project to build a mutually beneficial partnership with shrimp farmers.
- Through the policy of payment for forest environmental services, **households receiving forest protection contracts** will be supported to supplement **at least 500,000** VND/ha/year or an average of 1.000 VND/kg of shrimp certified internationally, depending on the agreement.

Conclusion

- Going to the market with a variety of ecological certificates is entirely feasible, including international certification and manufacturing facility certification, depending on the needs of each market.
- For mangrove conservation criteria, it is essential to ensure independent monitoring that complies with minimum forest coverage of 50%.
- Piloting the policy for payment for forest environment services in Ca Mau will be an important premise to complete the national PFES policy in mangrove.