



**VICTOR TAFUR** | *Environmental Law*





# Linkages between Biodiversity and Bioenergy: Inclusive Market Development

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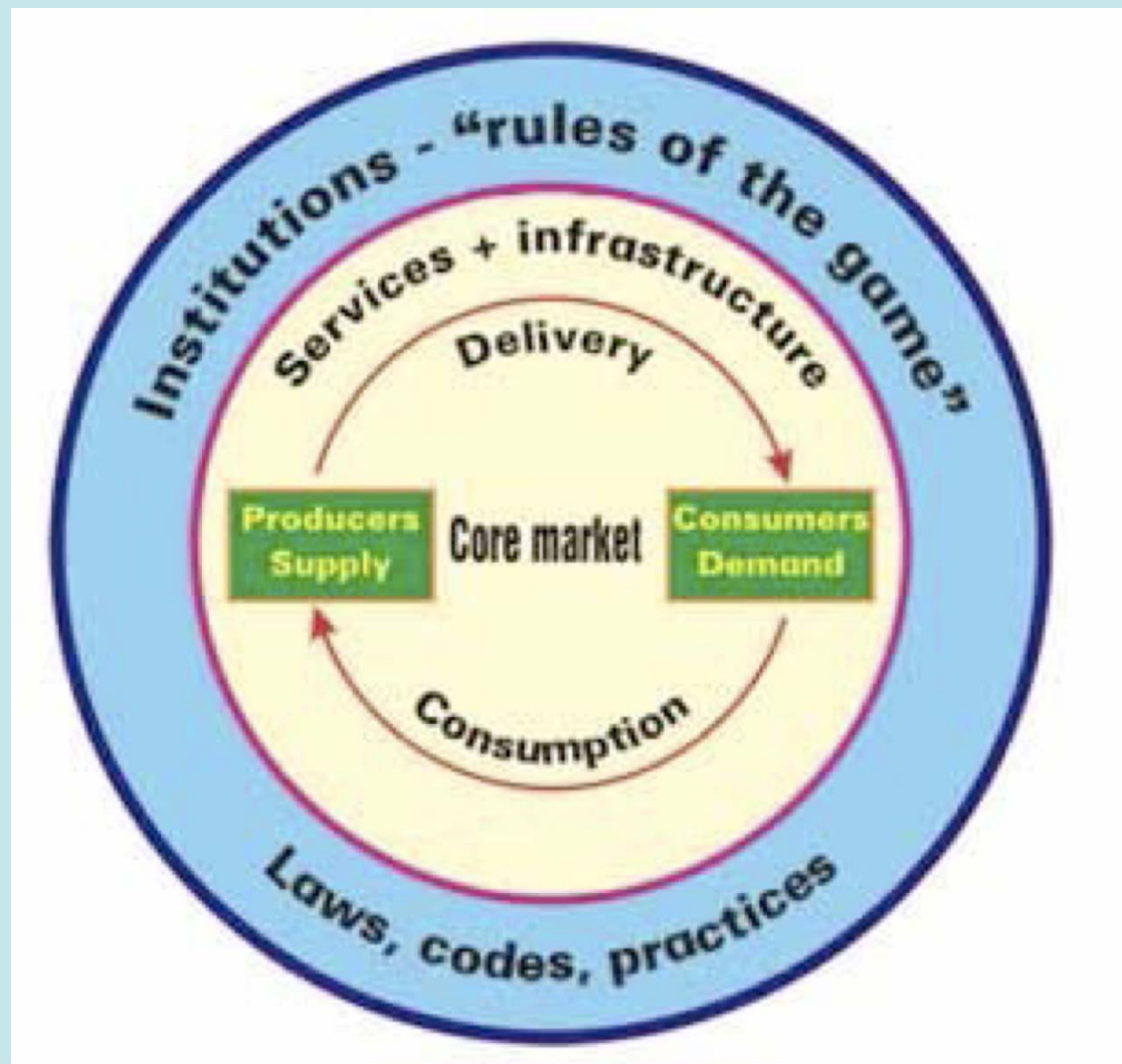
# Abstract Summary & Discussion Points

1. Purpose and goals of the paper
2. 'Inclusive Market/Business' defined
3. 'Inclusive' bioenergy case study
4. 'Inclusive' bioenergy v (+) biodiversity:  
Discussion of the 'inclusive' model and  
its potential for biodiversity protection
5. Conclusions

# ‘Inclusive Markets’ defined

- Markets that result in expanded choice and opportunity for the poor and produce outcomes that benefit the poor.
- As entrepreneurs and employees, such outcomes will be measurable in terms of increased returns on goods sold, improved access to labour markets and increased opportunities for decent work.
- As consumers, they will include increased choice and affordability for essential goods and services.

Source: UNDP (2007)



Source: UNDP (2007)

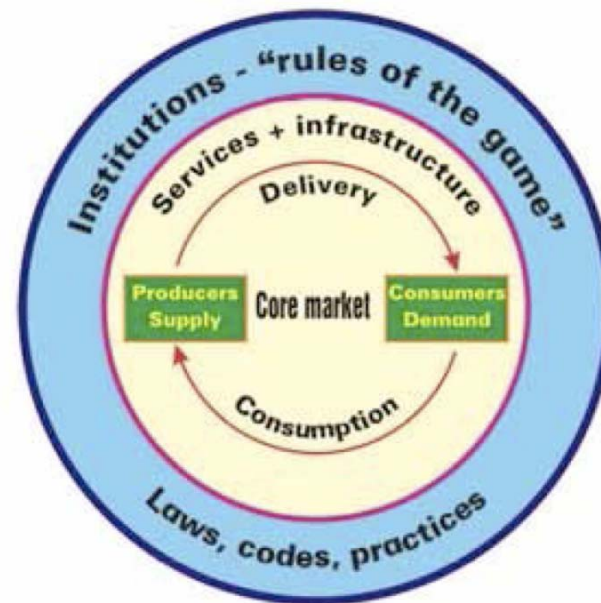
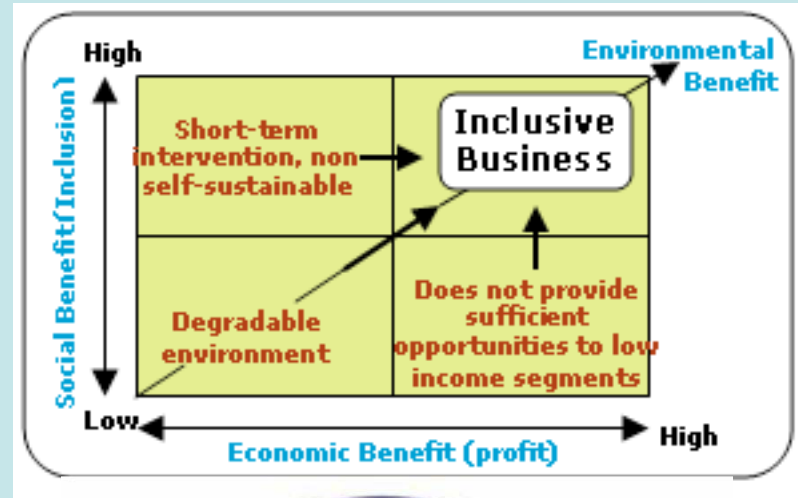
# ‘Inclusive Business’ defined

- An ‘inclusive business’ engages low-income communities across a company’s value chain—through direct employment; the development of suppliers, distributors and service providers from low-income communities; or through the innovative development and delivery of affordable goods and services that address unmet needs of low-income communities.

Source: WBCSD-SNV (2008)

# What is an 'Inclusive Business'?

- Working with the low-community to grow the business.
- Both profitable and have a clear development benefit for the low-income segment.
- Not Corporate Social Responsibility.
- Not Philanthropy.
- Environmental benefit?



# ‘Inclusive’ Bio-energy case study: Hondupalma

- Low-income community-level feedstock (oil palm) cultivation.
- “Marco Tulio Colindres earns a living from his oil palm plantation near his village ... member of HONDUPALMA, a social enterprise comprised of 30 cooperatives that represent 600 small producers.”



Source: SNV (2009)



Source: SNV (2009)

# ‘Inclusive’ Bio-energy case study: Hondupalma

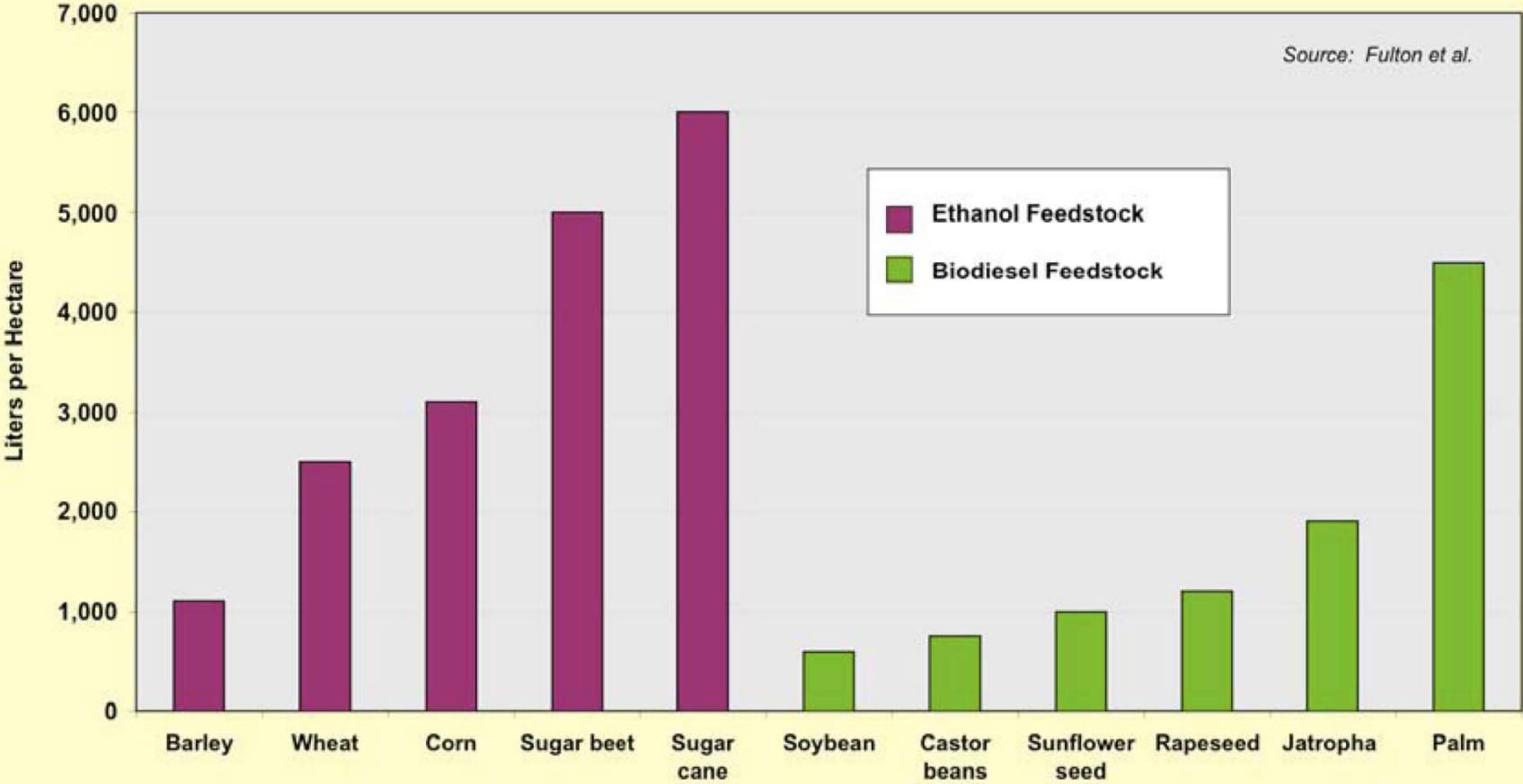
- Marco Tulio “became increasingly concerned about the possible negative environmental impacts of working with oil palm and the opportunities for his children to continue the plantation business.” [Compost technology was implemented to reduce water and soil contamination by the oil palm residues.]
- “Marco and his wife are also happy that the water contamination caused by the oil palm plantation has lessened significantly in their village.”

Source: SNV (2009)

# Bioenergy v Biodiversity: the Palm Oil Problem

- Primary areas of production are Southeast Asia, followed by the west coast of Africa and Latin America.
- Currently, Malaysia produces half the world's production of palm oil, followed by Indonesia and Nigeria.
- Presently, the fourth and fastest growing producer of palm oil is Colombia.

Figure 5. Biofuel Yields of Selected Ethanol and Biodiesel Feedstock



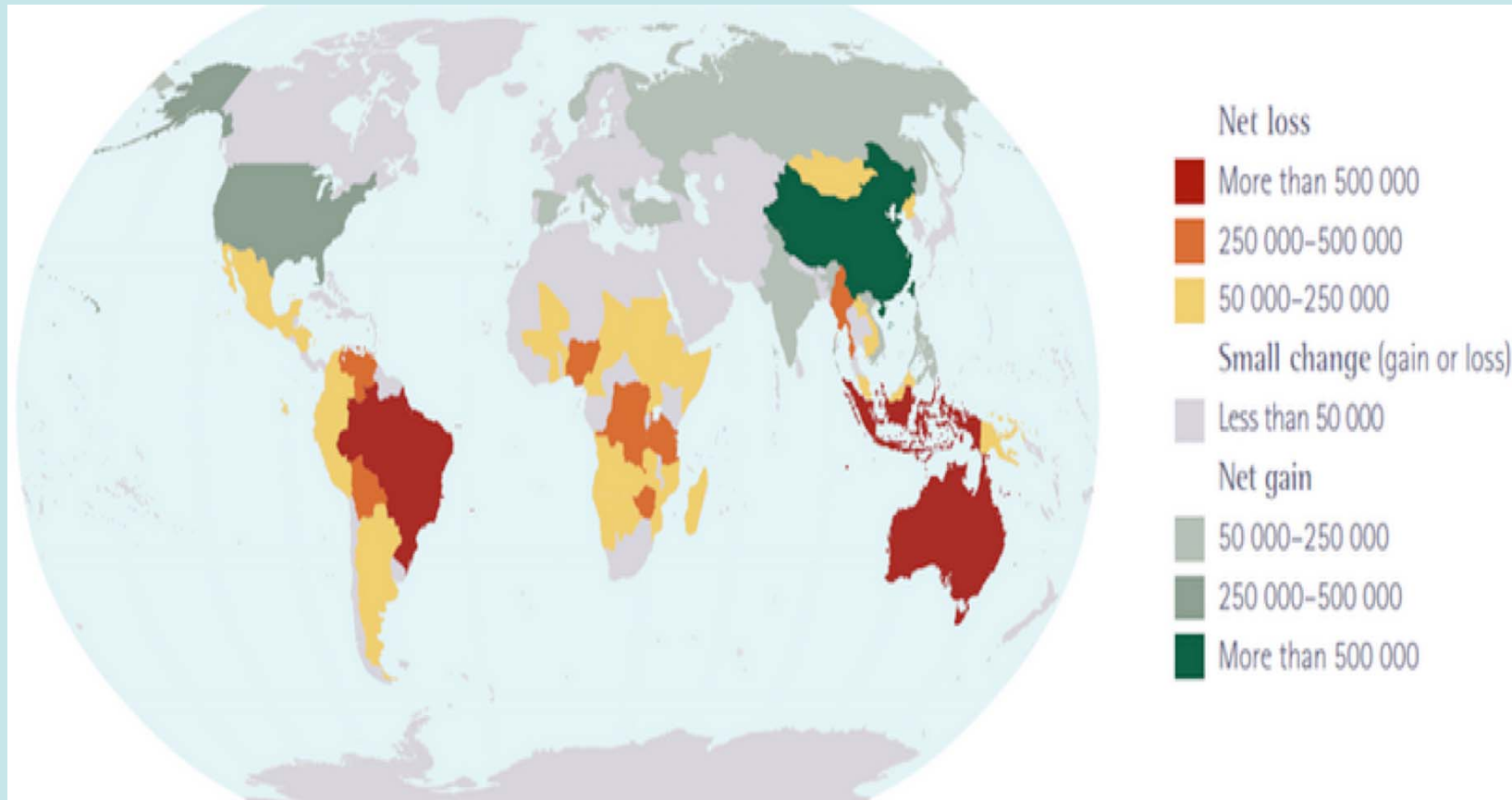
Source: SNV/WWF Study (2009)

# Global Forest Resources Assessment 2010 (FAO)

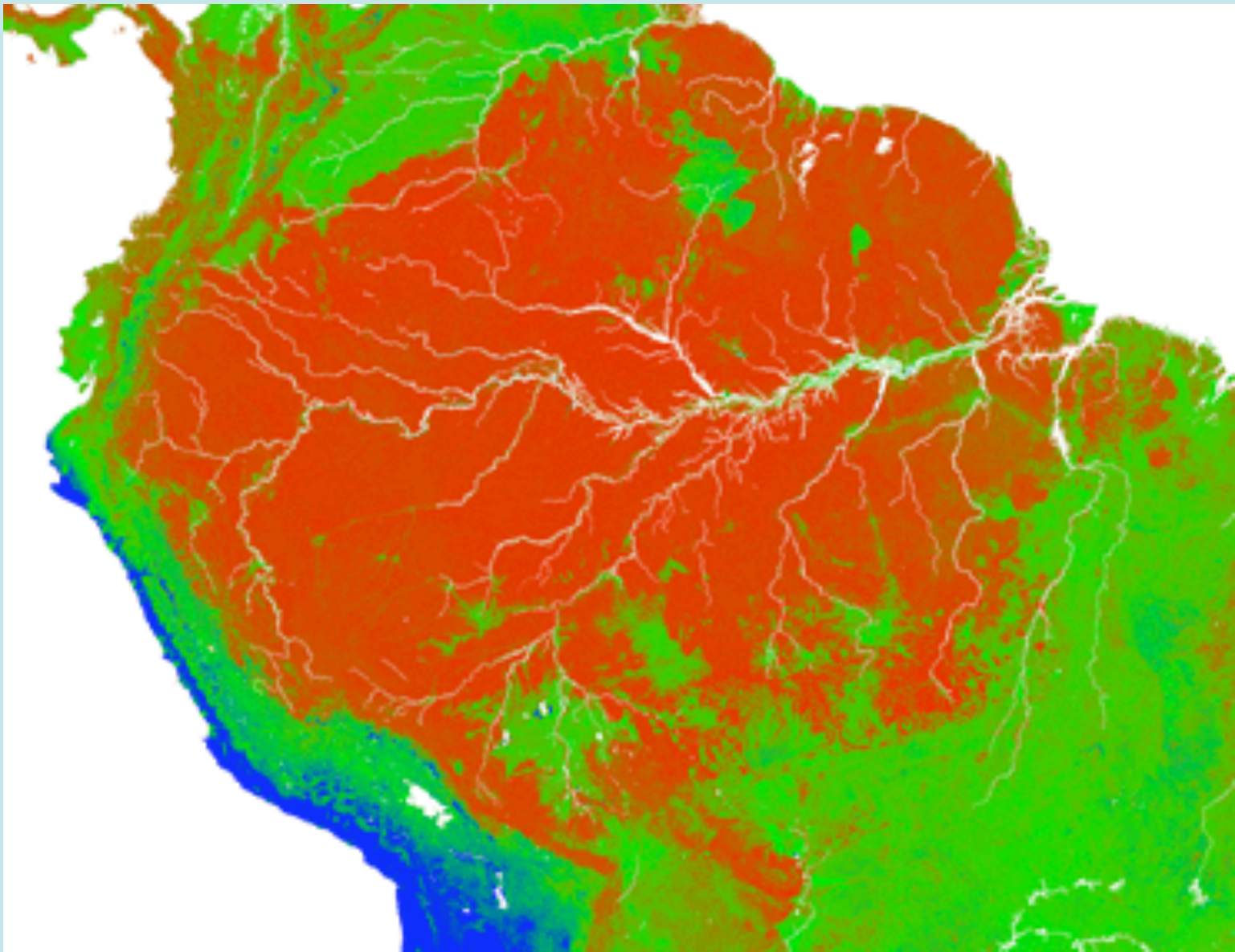


Source: FAO (2010)

# World Deforestation Rate 2005-2010



Source: [Desdemonadespair.org](http://Desdemonadespair.org)  
(2010)



Source: NASA



Source: Mongobay.org (photo by  
R.A. Butler)



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R.A. Butler)



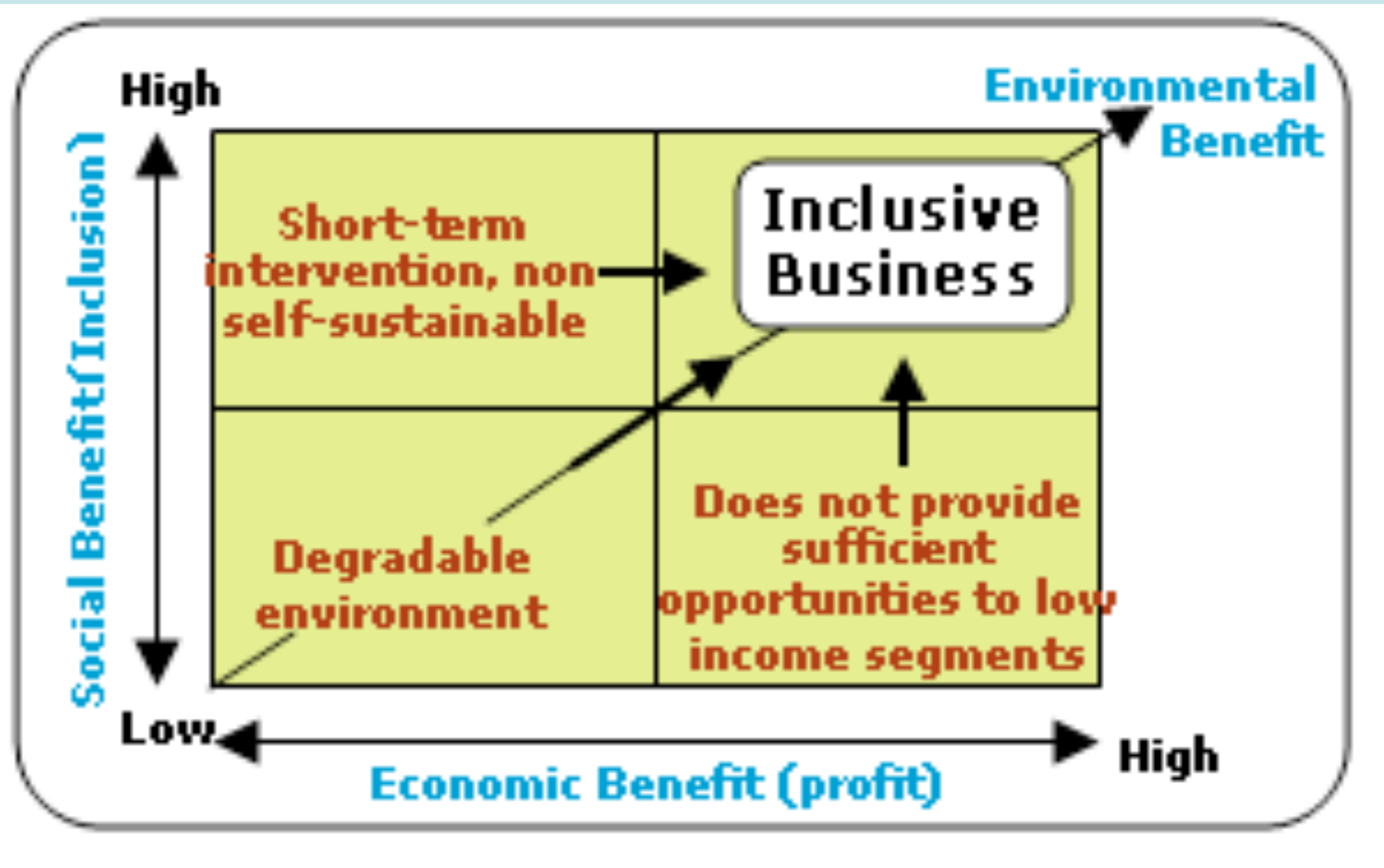
Source: [www.foeurope.org](http://www.foeurope.org)



Source: Greenpeace.org

# Conclusions: 'Inclusive Market/Business' redefined

- The paper discusses the urgent need to develop sustainable biofuels 'inclusive market/business' models, based on community-model feedstock cultivation, production, and consumption that engage the community as stewards of the world's biodiversity resources.
- Under the proposed model, low-income community becomes involved as entrepreneurs, employees, consumers, and stewards of biodiversity and the environment.



Source: SNV (2009)

# Conclusions: 'Inclusive Markets/Business' redefined

- Community-based models of feedstock production, processing, and use—trialing an 'inclusive business' approach—should follow sustainability guidelines such as those developed by the Roundtable on Sustainable Biofuels (RSB) and, specifically, incorporate goals/standards in order to conserve the biological diversity in the local community.
- Environmental laws, in particular, forestry laws, should recognize and facilitate the development of these models.

# Conclusions: 'Inclusive Market/Business' redefined

1. Design: set biodiversity/environmental goals & mechanisms for implementation with local knowledge/capacity.
2. Incorporate goal/standards into 'inclusive business' legal instruments (enforceable).
3. Establish auditing/verification tools.
4. Enable enforcement mechanisms.
5. Periodically review/revise results.



**Many Thanks / Muchas Gracias**

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