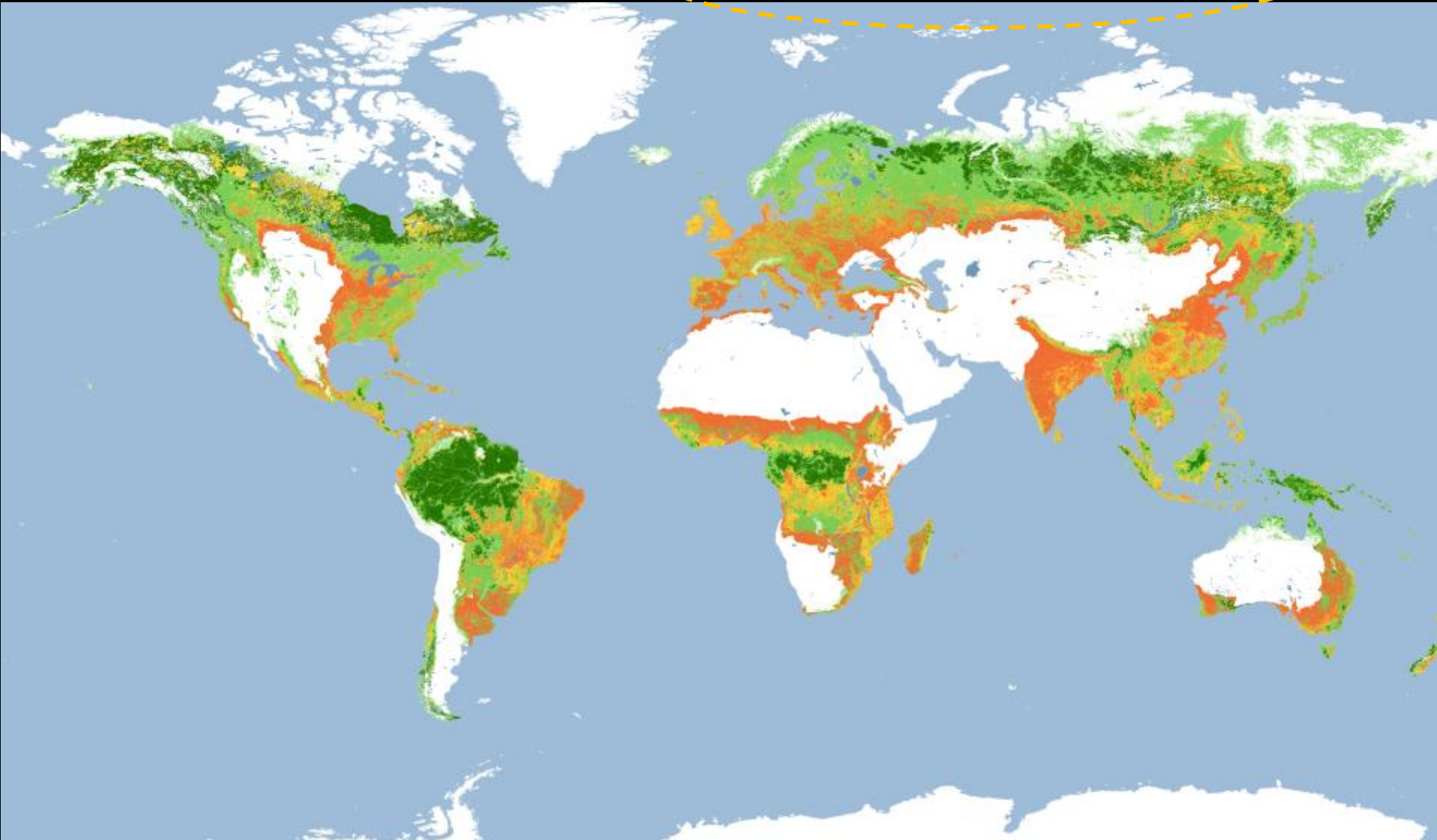# New tools to support conservation and forest restoration

April 28, 2014

Michael Verdone (Program Officer, IUCN Global Economics Program)

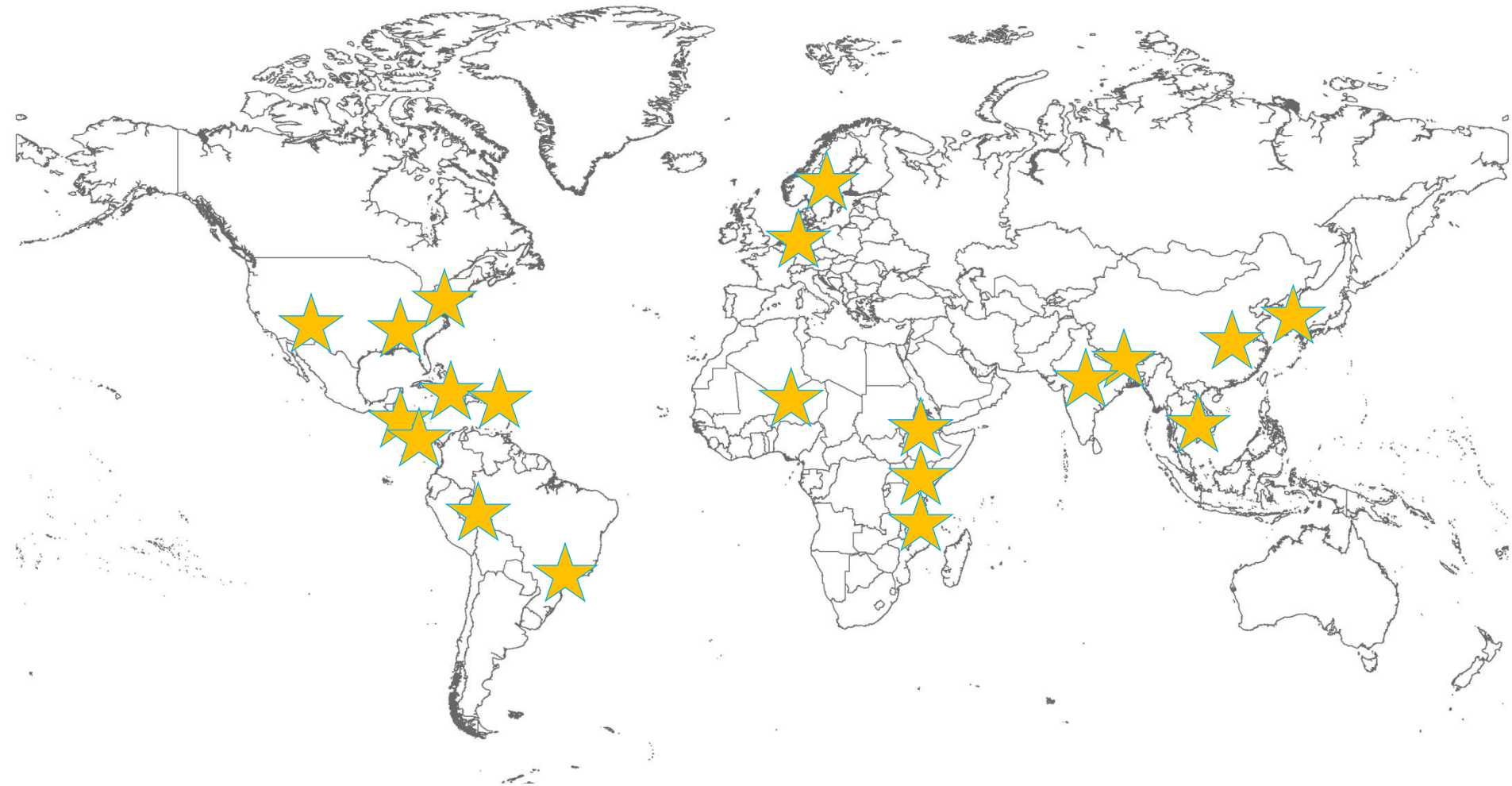# Current status of forest area

Intact Fragmented Degraded Deforested

"Rapid enabling conditions diagnostic"

Looking back to look ahead

Case studies

South Korea

Impact
- Increasing tree cover in the country from 35% to 64% (1952-2007)
- Increased forest density 14x , population grew by 2x, and economic growth by 300x (1953-2007)

Motivation
- Landslides, floods, and shortage of wood
- President Chung-hee made restoration a national priority
- Large reforestation campaigns

Contributing factors
- ↓ demand for fuelwood (90% of energy in 1950, 5% in 1980)
- Urbanization
- Good coordination between different levels of government

Implementation
- Series of 10-year reforestation plans (1973-today) with goals for funding, outreach, public participation, and implementation
- 460 experts in nurseries, well paid, production of 500 million stems / year

Southeastern United States

Impact
- 6 million hectares restored (1920-1970)
- ↓soil erosion, ↑ economic activity from industrial forestry

Motivation
- Massive soil erosion and a shortage of wood
- Unemployment ("The Great Depression" of the 1930s)

Contributing factors
- Secure property rights
- Homeowners benefited from replanted trees
- ↓ demand for fuelwood

Implementation
- Government subsidies and employment programs
- Outreach and extension programs by the government and private companies

1. Select area/geographic region

2. Diagnose the condition regarding the success factors

Motivate

Enable

Implement

Topic	Feature	Key success factors
Motivate	Benefits	• Restoration generates private benefits
		• Restoration generates public benefits
		• Restoration generates environmental benefits
	Awareness	• The public is aware of the benefits of restoration
		• Restoration opportunities are identified
	Crisis events	• Crisis events are leveraged
	Legal requirements	• National and international laws require restoration
		• The laws are understood and applied
Enable		
Implement		

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	Legal requirements	• National and international laws require restoration
		• The laws are understood and applied
Enable	Ecological conditions	• Soil, water, climate and fire conditions of are suitable for restoration
		• The plants and animals that may impede the restoration are absent
		• Native seeds or species are available
	Market conditions	• Competing demands of degraded forest land decrease
		• Value chains for products of restoration exist
	Political conditions	• Land and natural resource tenure is in place and assured
		• Policies affecting restoration are aligned and optimized
		• Logging restrictions in natural/primary forests
		• Felling restrictions are in place
	Social conditions	• The local population is empowered to make restoration decisions
		• The local population benefits from restoration
	Institutional conditions	• The roles and responsibilities of restoration are clearly identified
		• There is effective institutional coordination
Implement		

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		• There is effective institutional coordination
Implement	Leadership	• There are local advocates/'champions' of restoration
		• There is sustained political commitment
	Knowledge	• There is specific knowledge of relevant candidate landscapes to restore
		• Specific knowledge of restoration transferred between collaborators or through extension services
	Technical design	• Restoration design is based on technical knowledge future climate scenarios
	Finance and incentives	• Positive incentives and funds for restoration outweigh the negative incentives
		• Incentives and funds are easily accessible
	Feedback	• An effective system of performance monitoring and evaluation is in operation
		• The benefits are diffused amongst beneficiaries

Topic	Feature	Key success factors	Status
Motivate	Beneficios	• Restoration generates private benefits	🟩 Green
		• Restoration generates public benefits	🟩 Green
		• Restoration generates environmental benefits	🟩 Green
	Awareness	• The public is aware of the benefits of restoration	🟨 Yellow
		• Restoration opportunities are identified	🟩 Green
	Crisis events	• Crisis events are leveraged	🟩 Green
	Legal requirements	• National and international laws require restoration	🟩 Green
		• The laws are understood and applied	🟥 Red
Enable	Ecological conditions	• Soil, water, climate and fire conditions of are suitable for restoration	🟩 Green
		• The plants and animals that may impede the restoration are absent	🟥 Red
		• Native seeds or species are available	🟩 Green
	Market conditions	• Competing demands of degraded forest land decrease	🟨 Yellow
		• Value chains for products of restoration exist	🟩 Green
	Political conditions	• Land and natural resource tenure is in place and assured	🟩 Green
		• Policies affecting restoration are aligned and optimized	🟩 Green
		• Logging restrictions in natural/primary forests	🟩 Green
		• Felling restrictions are in place	🟥 Red
	Social conditions	• The local population is empowered to make restoration decisions	🟩 Green
		• The local population benefits from restoration	🟩 Green
	Institutional conditions	• The roles and responsibilities of restoration are clearly identified	🟨 Yellow
		• There is effective institutional coordination	🟨 Yellow
Implement	Leadership	• There are local advocates/'champions' of restoration	🟥 Red
		• There is sustained political commitment	🟩 Green
	Knowledge	• There is specific knowledge of relevant candidate landscapes to restore	🟩 Green
		• Specific knowledge of restoration transferred between collaborators or through extension services	🟨 Yellow
	Technical design	• Restoration design is based on technical knowledge future climate scenarios	🟩 Green
	Finance and incentives	• Positive incentives and funds for restoration outweigh the negative incentives	🟩 Green
		• Incentives and funds are easily accessible	🟥 Red
	Feedback	• An effective system of performance monitoring and evaluation is in operation	🟩 Green
		• The benefits are diffused amongst beneficiaries	🟩 Green

Limitations

- The factors are interrelated

- No single case has every key success factor

- The more factors that are in place, the greater the chance of success
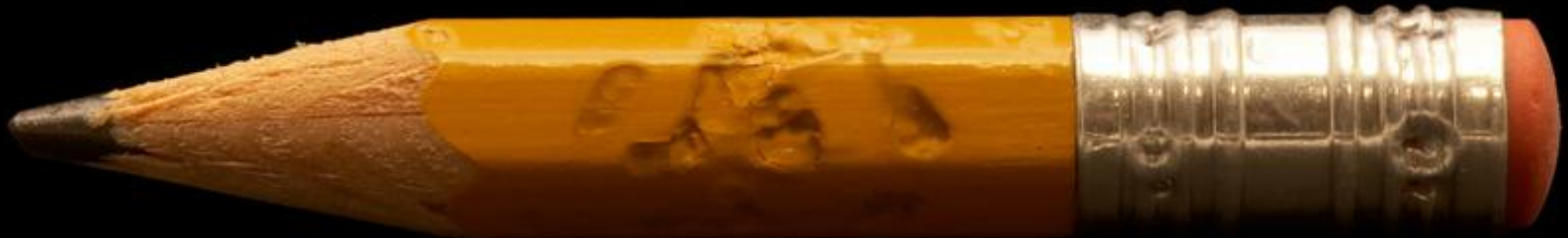
3. Identify policies to fill in the gaps on the key success factors