



incredible

Innovation Networks for Cork, Resins & Edibles
in the Mediterranean basin

#NWFPpolicy
www.incredibleforest.net

Policy Forum “Untapping the potential of non-wood forest products for Europe's green economy”

16th - 17th March 2021
Online event

Coordinator



Partners



CTFC



Forestas
Agenzia forestale regionale pro sviluppo de su
territòriu e de s'ambiente de sa Sardigna
Agenzia forestale regionale per lo sviluppo del
territorio e dell'ambiente della Sardegna
SardegnaForeste



INIA
Instituto Nacional de Investigación
y Tecnología Agraria y Alimentaria



**HRVATSKI
ŠUMARSKI
INSTITUT**

CROATIAN
FOREST
RESEARCH
INSTITUTE

**INSTITUTO
SUPERIOR D
AGRONOMIA**
Universidade de Lisboa

unac
União da Floresta Mediterrânica



University of Ioannina
Department of Biological
Applications and Technology



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement N° 774632.

Sustainable Sourcing of Nontimber Forest Products: Why? What will it take?

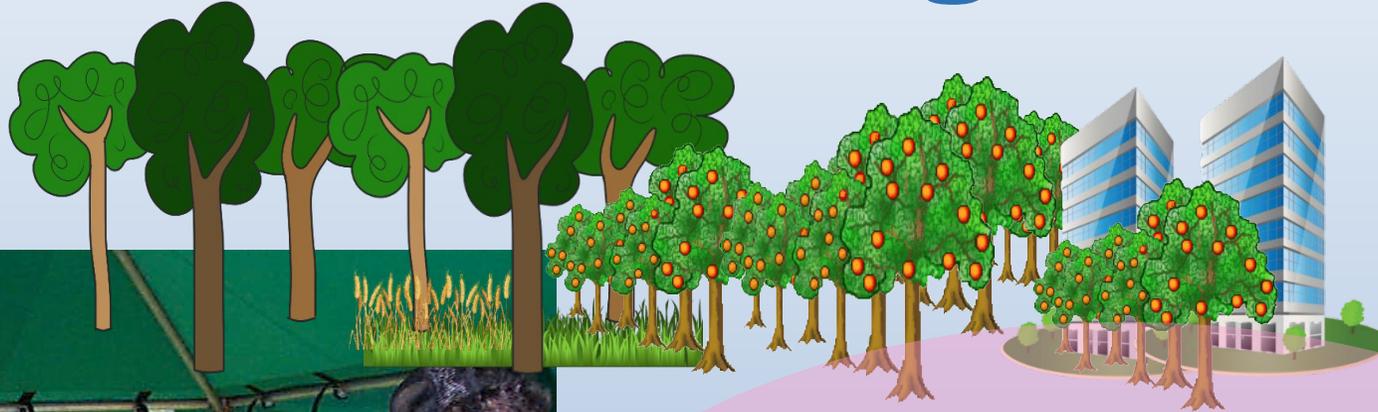
*Policy forum “Untapping the potential of non-wood
forest products for Europe’s green economy*



James Chamberlain, Ph.D.
USDA Forest Service
16 March 2021



Sustainable Sourcing & Society



Diverse & Dispersed Stakeholders

Personal Consumption

Rural

Household

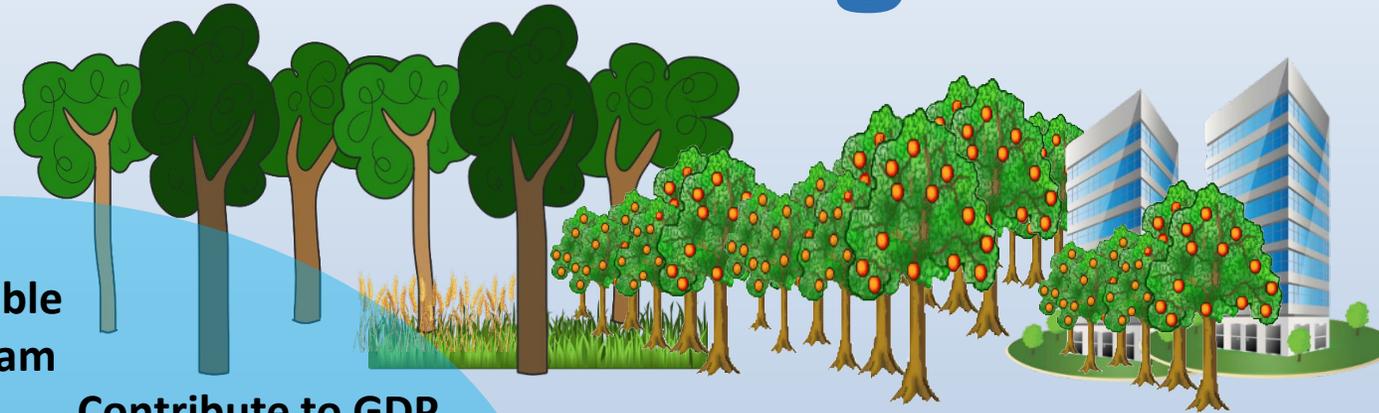
**Traditional & Local
Knowledge**

**Livelihood
Security**

Organic vs. Corporate

Cultural Identity & Preservation

Sustainable Sourcing & Economy



**Stable & Reliable
Revenue Stream**

Contribute to GDP

Under-served constituents

Risk Mitigation

Equitable Benefit Sharing

Meeting Consumer Demand

**Diversification & Differentiation
Opportunities**

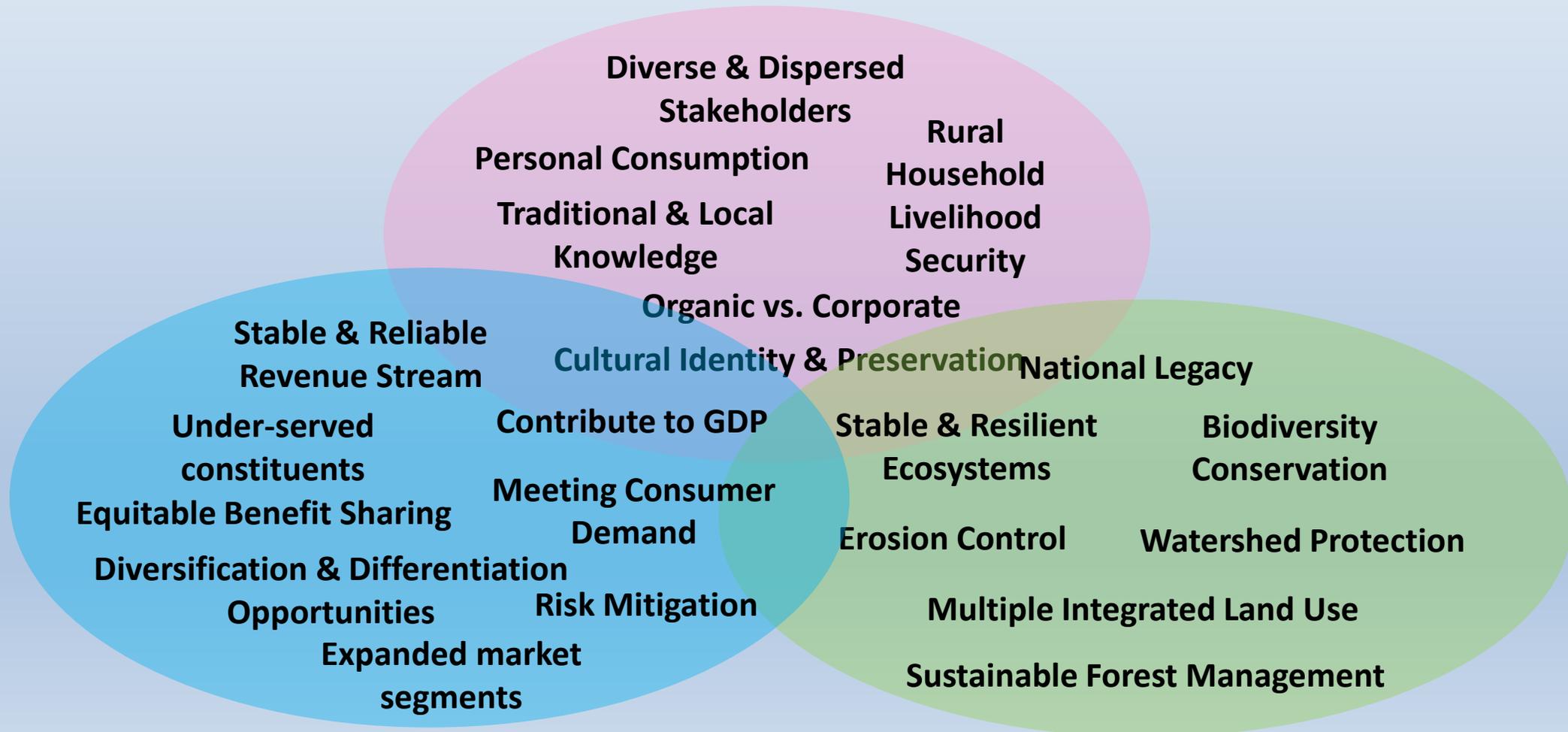
Expanded market segments

- € 3.5 billion – market value across Europe
- € 20.5 per hectare forest land
- NWFP value = 71% annual roundwood
- € 8.7 billion – Global Trade
 - Europe – € 4.3 billion in imports

Sustainable Sourcing & Environment



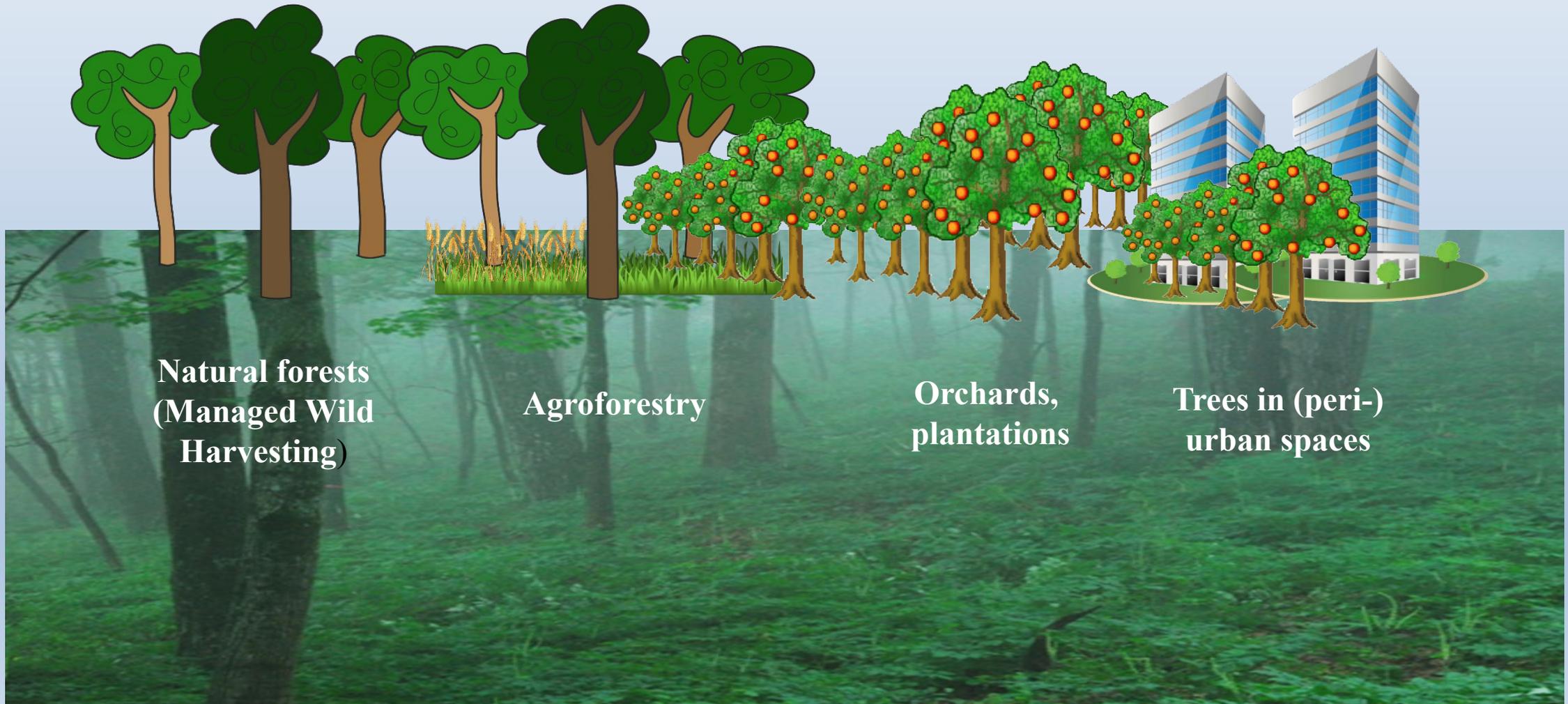
Complex Interactions

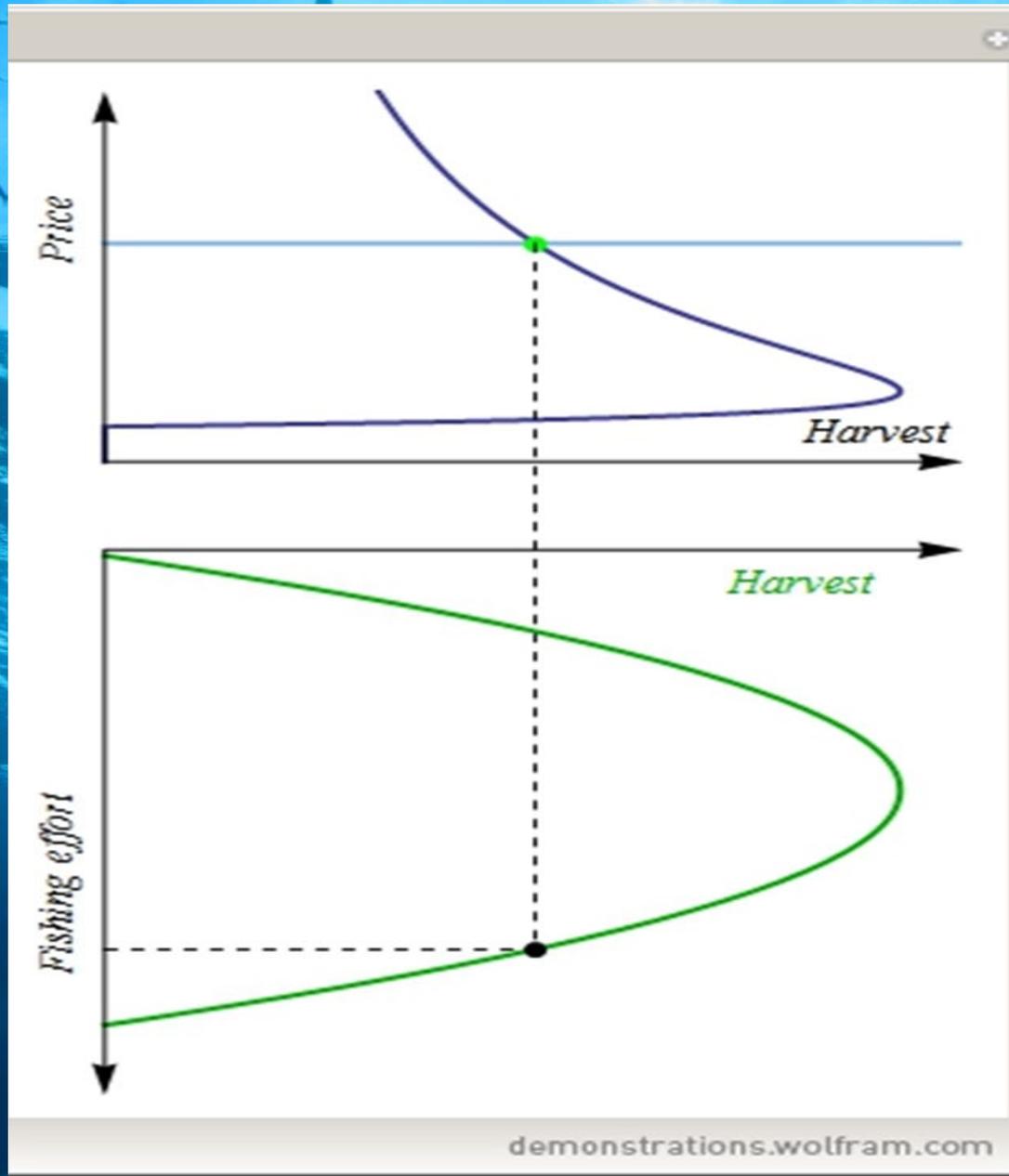


Forest Biodiversity



Production Systems

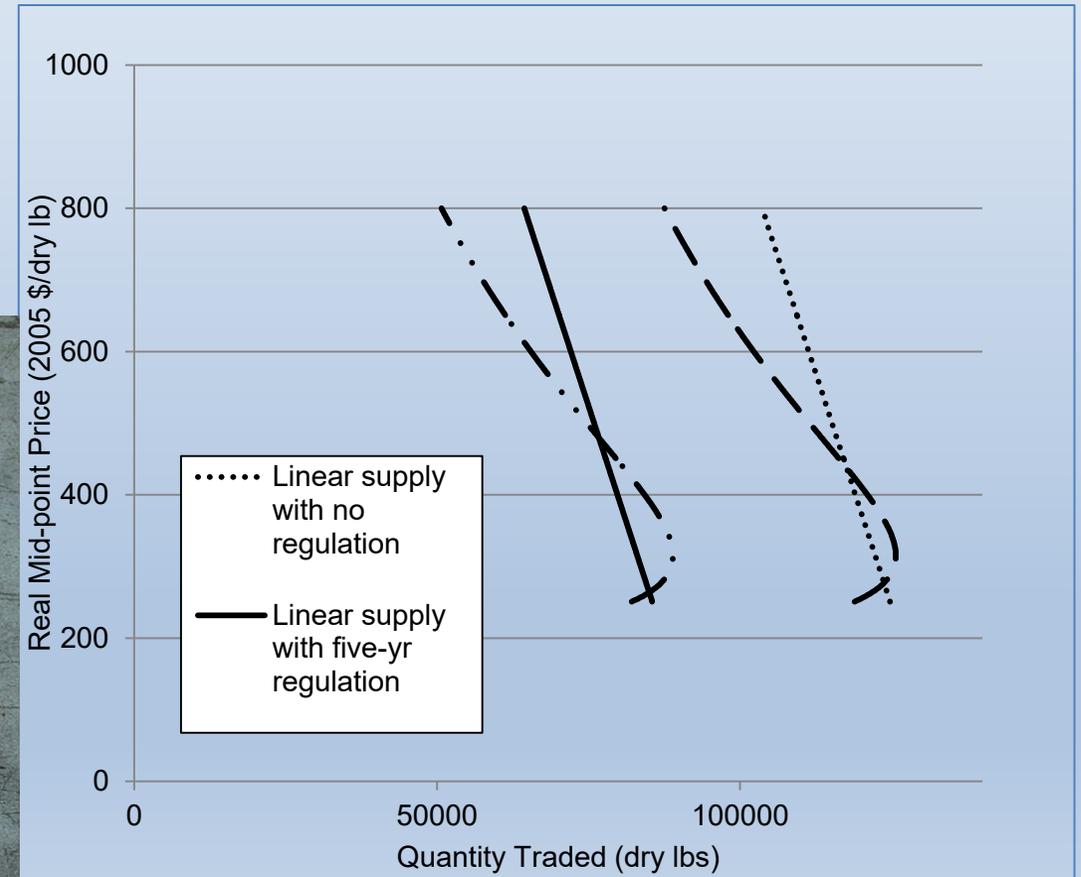
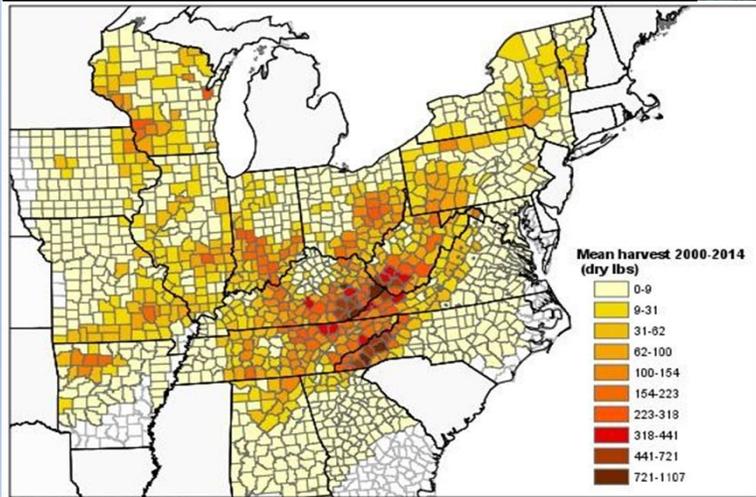




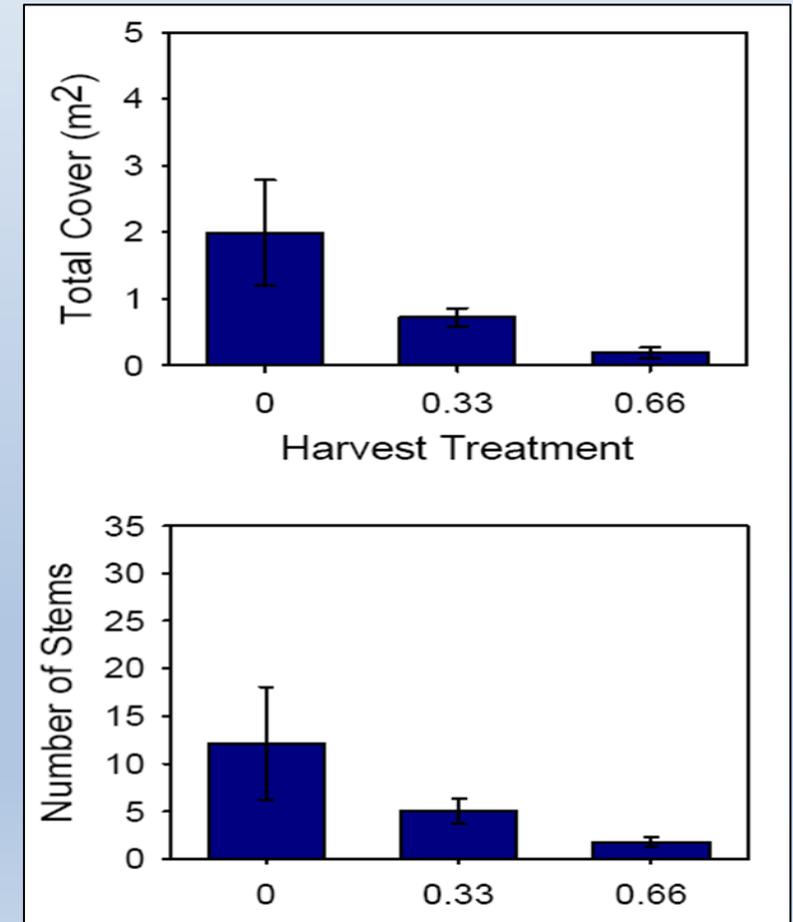
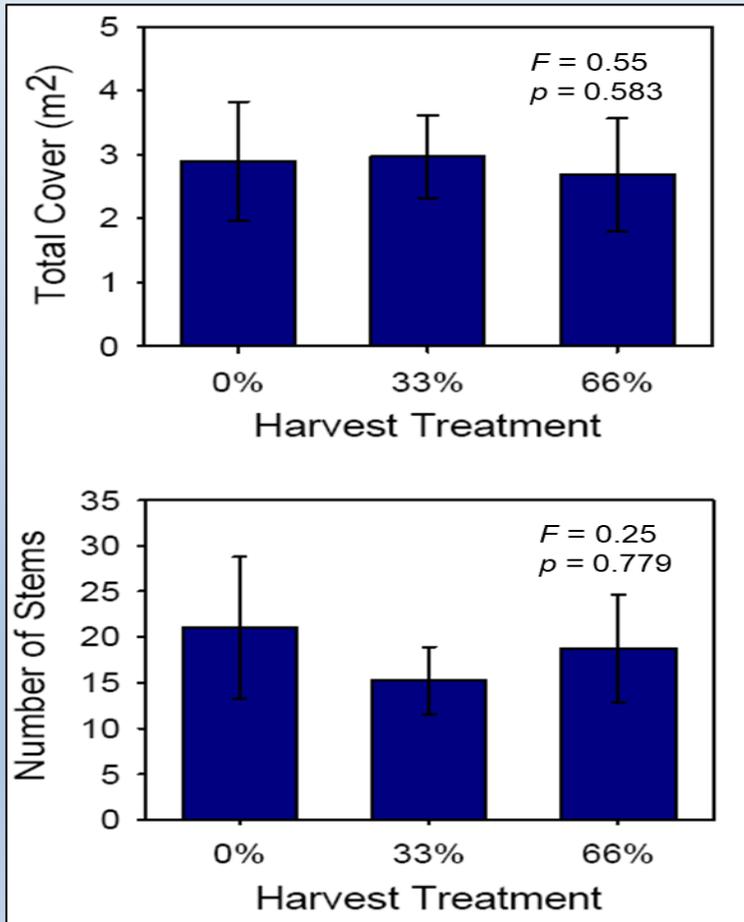
- Open Access Resources
 - Fixed production base
 - Lack of ownership [tenure]
 - Inability to reproduce fast enough
- Backward bending supply curve
 - Biological limitations on reproduction
 - Inability to restrict access

Gordon 1954 – open access fisheries

Wild-Harvested American ginseng



Experimental Harvest Black Cohosh



What's Needed

INVENTORY
GROWTH
REMOVALS
MORTALITY



What's Needed

INVENTORY



Sustainable Sourced Product?

STARTING INVENTORY

+

MEAN ANNUAL INCREMENTAL GROWTH

=>

MEAN ANNUAL HARVEST

+

MEAN ANNUAL INCREMENTAL DECLINE



Sustainable Sourced Product

MEAN ANNUAL INCREMENTAL GROWTH

= >

MEAN ANNUAL REMOVALS

+

MEAN ANNUAL INCREMENTAL MORTALITY



Monitoring



Source: Vacik et al. 2020

What's it going to take?



Timber



Cork



James.I.Chamberlain@usda.gov



Thank you!