

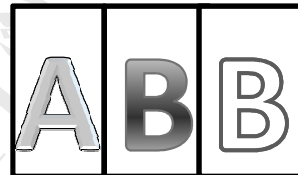


UNIVERSITÀ
DEGLI STUDI
FIRENZE

Experiences of biodiversity value addition

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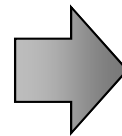
Unità di Ricerca Agrobiodiversità
Bioeconomia e Benessere
Università di Firenze



Alberese 9/10 Novembre 2017

Bio diversity value addition. Which perspective?

- Marketing
- Sociology
- Policy analysis:
- Economic analysis



a case of market solution for underprovision of a public good



Which example? -> Ancient wheat markets

Two main issues highlighted

- **Transaction costs**
- **Property rights regimes**



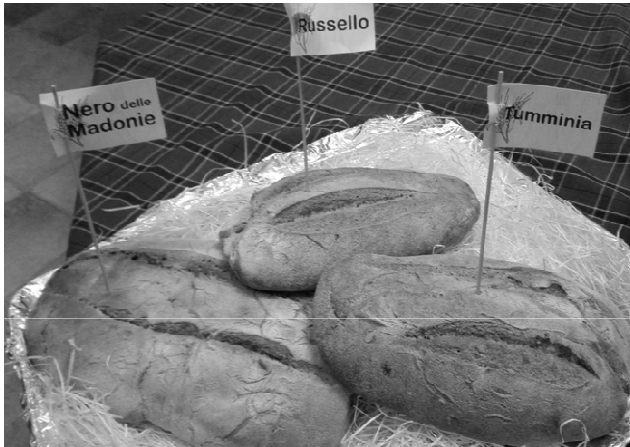
Wheat landraces

- **Common characteristics**
 - **Lower yield**
 - **Higher straw**
 - **Nutritional characteristics**
 - **Agronomic characteristics**
 - **Well adapted to organic agriculture***



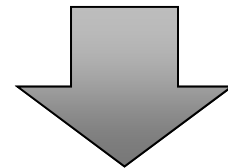
*cultivated before green revolution

Old weath varieties and landraces: Transaction costs



Examples of (almost)
credence characteristics

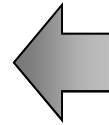
- Differentiated products
- Experience and Credence characteristics
- Asymmetric information
- Lacking legal standards
- Non codified techniques
- No or few informations on price and quantities (like many minor crops)



**Higher
Transaction Costs**

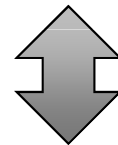
Asset specificity and socio-technical regimes

- specific assets
- Non standardized knowledge



Landraces production chains are niche productions

High TC



The case of the combine harvester

Conventional wheat chains are part of a coherent socio-technological system

Lower TC

Property regimes

We can distinguish between 4 types of Property regimes for natural resources such as germoplasm and/or for the related brands/indications:

- **Private property**
- **Common property**
- **Public property**
- **Open access**

Private property

The holder is an individual or a corporation who has rights to undertake socially acceptable uses of the resource

Others have duty to refrain from preventing the use by the holder



Common property

It is private property for a group of co-owners.

The owners have the right to exclude non members

Non members have the duty to abide by exclusion

Member of the co-owners group have both rights and duties with respect to the use/maintenance of the thing owned



Public property

Agencies have right to make decisions about the use/access rules.

Individuals have duty to observe use/access rules set by controlling agencies

(not relevant so far)



Open access

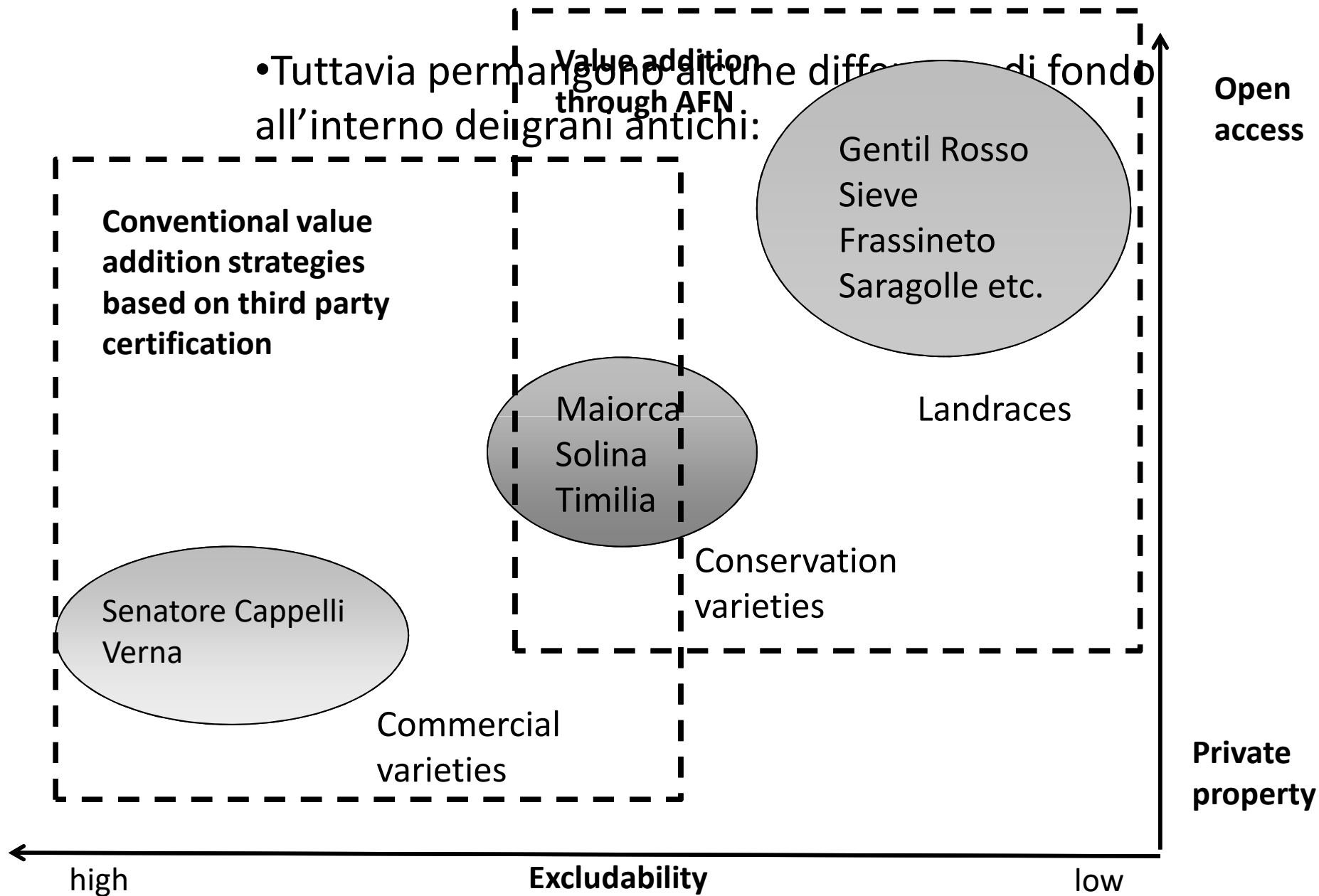
There is no property at all: whoever wants to use a benefit stream from the resource may do so.

Individuals have the privilege to use the resource but no right with respect to use rates and maintenance of the resources

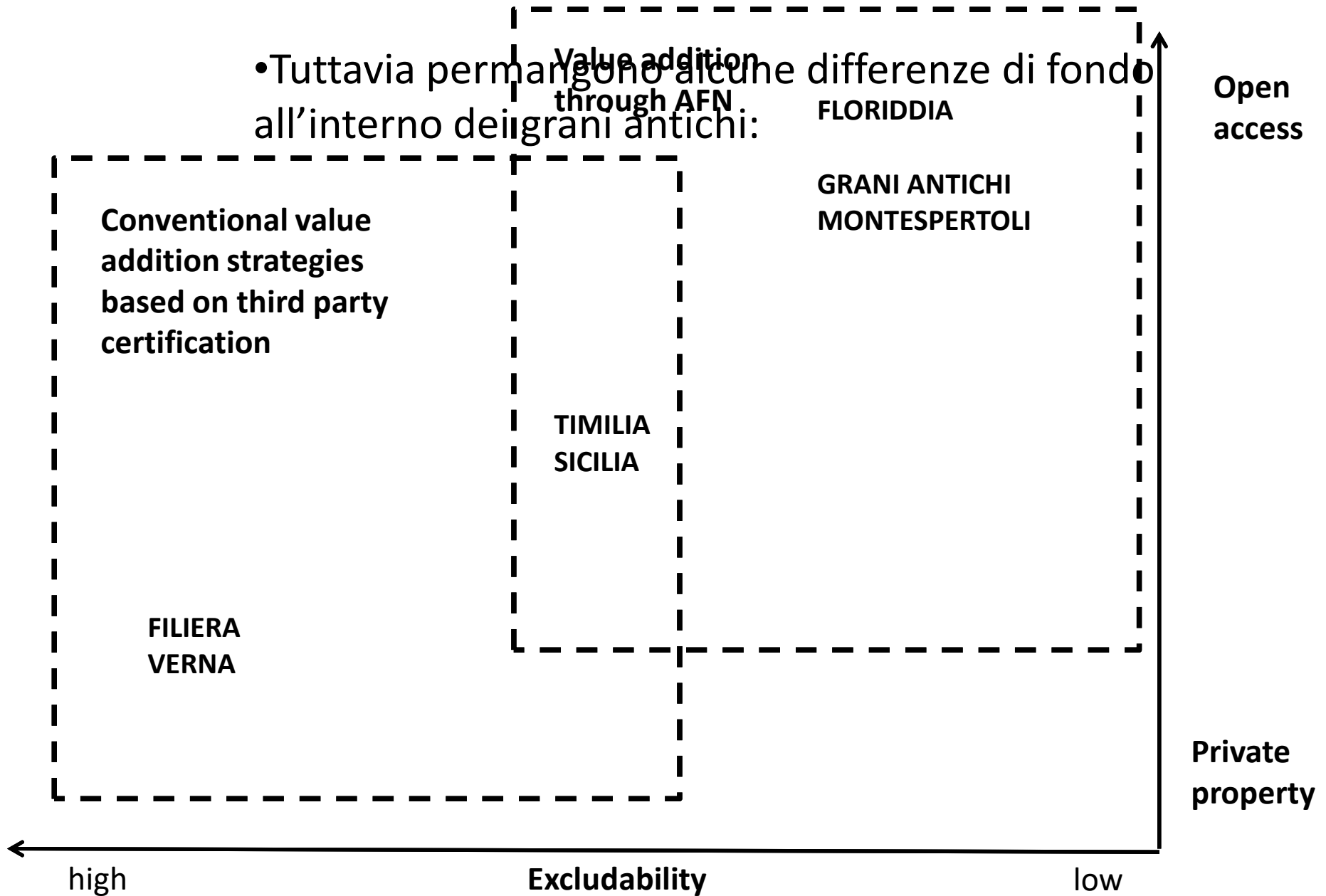
This is the case of most wheat landraces



Relationships between property regimes and value addition ?



4 Experiences





Verna

Commercial variety



Verna Supply Chain

- **15 years ago the Consorzio Agrario di Siena started the production of certified seed**
- **In 2015 a formal supply chain is set out thanks to Rural Development funds**

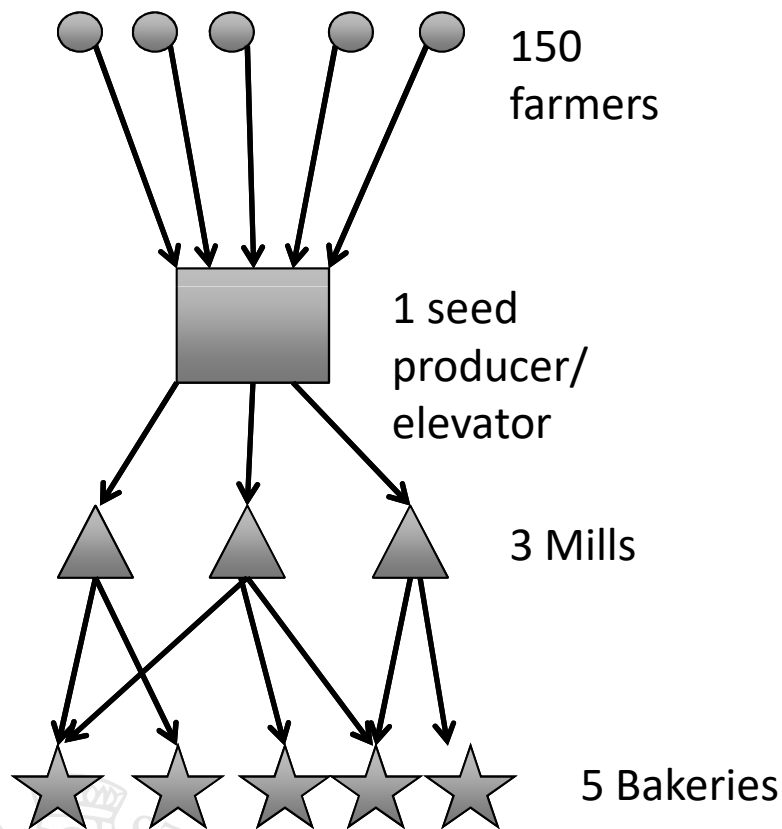
- **Current size: 1500 q of seeds sold to 120-130 farms (80% in Tuscany) 6 -7 hundred tons of milling wheat produced**
- **Consorzio agrario: act as seed producer and elevator**
- **Prices fixed by a supply chain agreement**
- **Written agreements with mandatory use of certified seeds**

- **Third party ISO 22005 (traceability in the food chain) certification**
- **Trade mark licensed by ETS to Consorzio Agrario di Siena**

- **Product : cereal products from single variety**



Verna supply chain



Germoplasm : private

Trade mark: private

Formal transactions: yes

Territorial concentration: low

Timilia

Conservation variety



Timilia in Sicily

- **2004** the variety was rediscovered by a farmer **Giuseppe Lirosi**
- **2014**: Li Rosi registered the variety in the national Register of Conservation variety as “**Timilia a reste nere**”
- **Due to the conservation variety regulation only 20 tons of seed are certified every year**
- **Size**: a yearly acreage of **1000 hectares** is sown each year which would require at least **200 tons of (certified) seed**
- **Timilia is sold through a variety of short and long supply chains including a slow food presidio (Pane nero di castelvetrano) and a specialist retailer chain (NaturaSi)**
- **Frauds are a problem**
- **Some private trademarks have been registered**





RIGGI M. & A.
FRATELLI S.R.L.
CALTANISSETTA
2013

TIMILIA

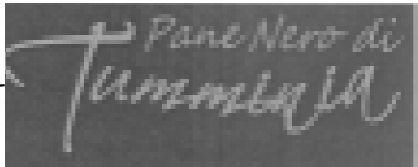
TERRE E TRADIZIONI
SRL VERONA
2013

ZAMBON
ALBERTO
Vighizzolo d'Este
2017

TIMILIA



MOLINI DEL PONTE
Castelvetrano
2013



La varietà “Timilia a reste nere” è stata iscritta al registro delle varietà da conservazione nel 2014



Timilia in Sicily

**Germoplasm : partly
free access, partly (the certified one)
private**

**Trade mark: several
private**

Formal transactions: ?

**Territorial
concentration: low**



Frassineto, Andriolo and others

Landraces



Ancient Grains Montespertoli

9 years ago farmers in the area started the production of ancient wheat varieties

Size: 80 tons of wheat from about 30 farmers

Miller: acts as both elevator and miller

Price fixed by the Association

Verbal agreements

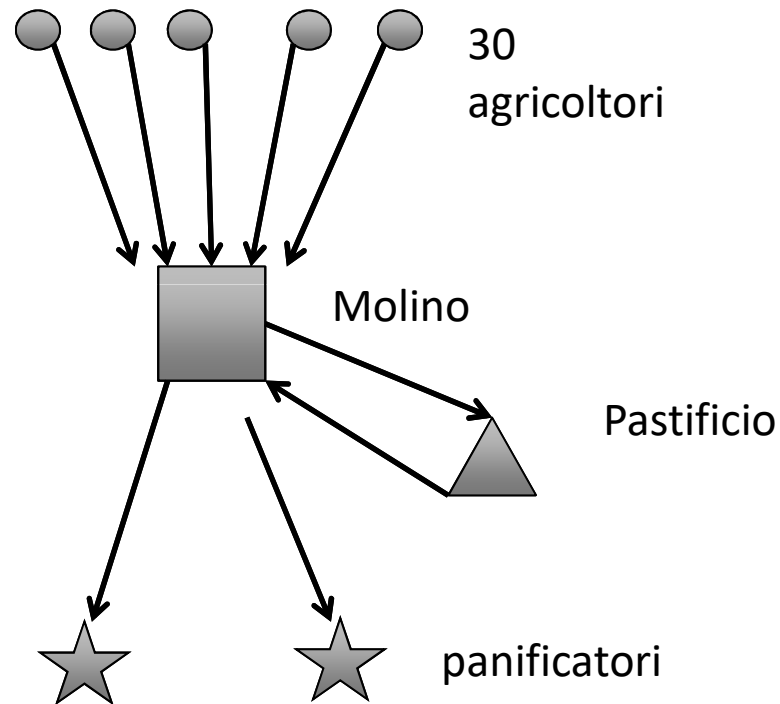
Participatory guarantee system

Collective trademark owned by the Association

Product : bread from e mixture of ancient and local varieties



Ancient Grains Montespertoli



Germoplasm : free access

Marchio: common property

Formal transactions: no

Territorial concentration: high

Price to the farmer (Organic): € 600/ton

Floriddia

Organic farmer within a network of 10 firms

Size: more than 300 hectares

Miller: Floriddia acts as miller, baker and pasta maker for the network

Wheat Price : interval of variation specified in the network agreement

Hierarchy instead of market

Reputation building by Floriddia

Trademarks owned by the farmer

Product : bread and pasta from a mixture of ancient and local varieties



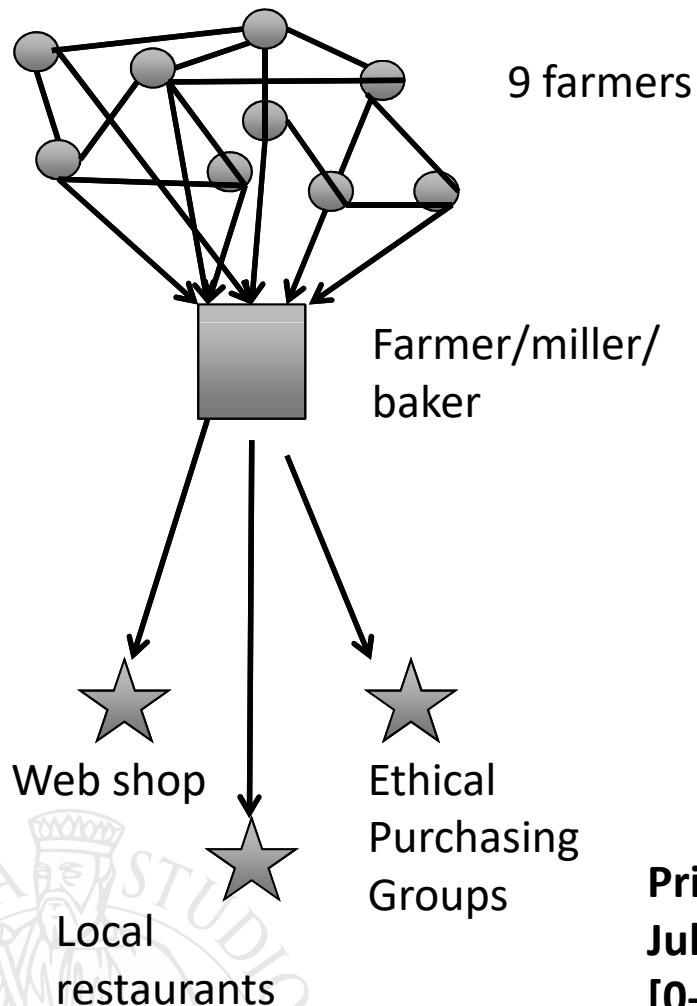


ROSARIO
FLORIDDIA
2017

ROSARIO
FLORIDDIA
2016



Floriddia



Germoplasm : free
access

Trademark: private
property

Formal transactions:
written network
agreement

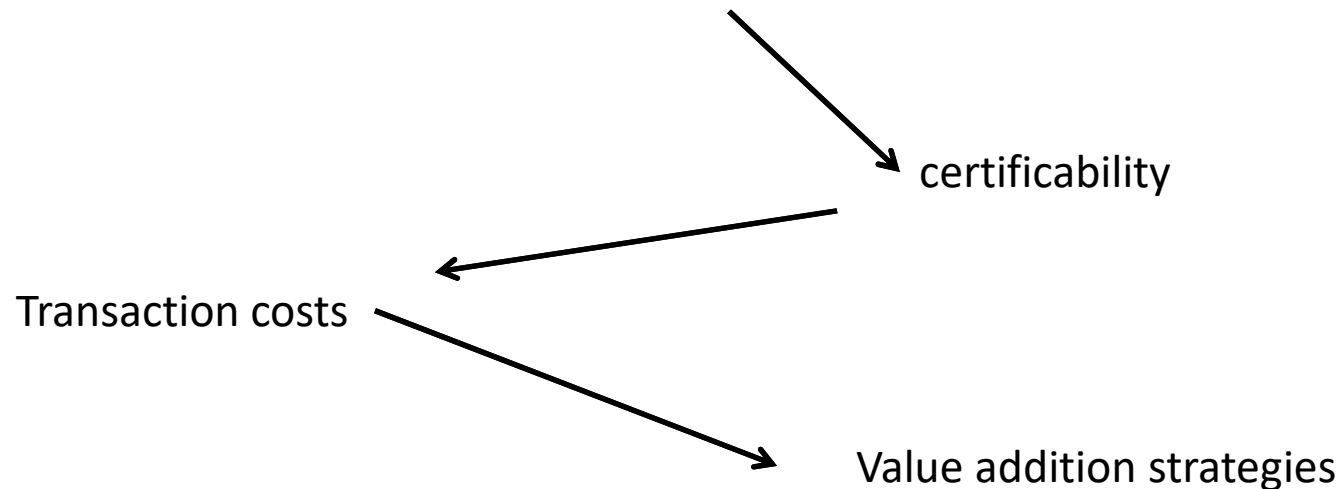
Territorial
concentration: high/
low (web shop)

**Price to the farmers:
July Bologna price +
[0-100%]**

Summing up

There is no one size fit all solution to ancient wheats value addition

Property rights on germoplasm
trademarks





Aknowledgments



Thematic network H2020



LIFE



PIF GRANT

