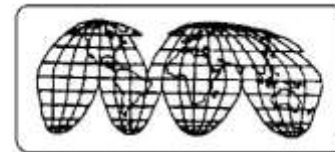


# **Collapse of tobacco farming in Europe**

## Reality or myth?

Prof Helmut J Geist



International Geographical Union  
COMMISSION ON LAND USE/COVER CHANGE

**Land Use and Land Cover Changes in a Globalised World**

Charles University, Prague, Czech Republic

28 June 2010

- **Introduction**

Which theories to study land use transitions – including collapse – in a globalised world?

- **Tobacco in Europe**

[1] Structural analysis

*Growing Areas-Growers-Modes of Cultivation*

[2] Relational analysis

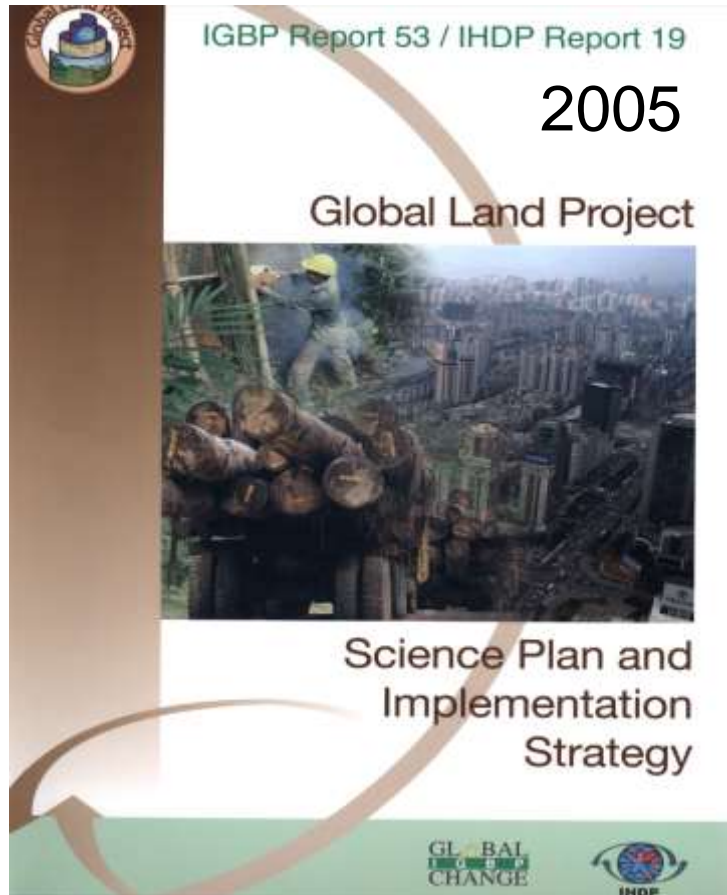
*Functions-Actors-Networks-Markets*

[3] Dynamics of change

*Policy-Corporate Decision-Making-Capital Mobility*

- **Conclusion**

# How to research LU transitions?



## Theme 1 Dynamics of land systems

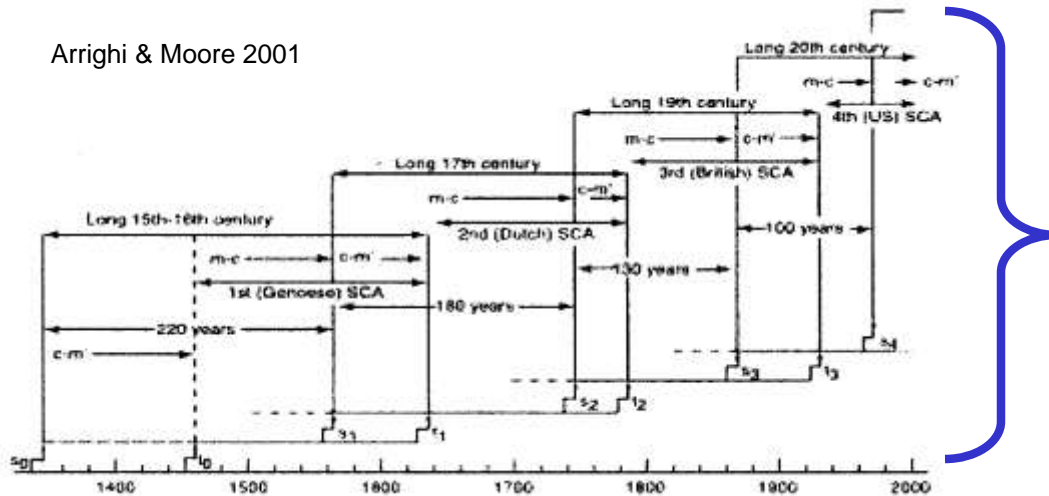
### Issue 1.1 Globalisation

- “*Global businesses*”
- “*Monopoles/oligopoles*”
- “*Local repercussions*”  
including “collapse”

But – which theories?

# Global agricultural regime (GAR) theory

Arrighi & Moore 2001



**Neoliberalism**

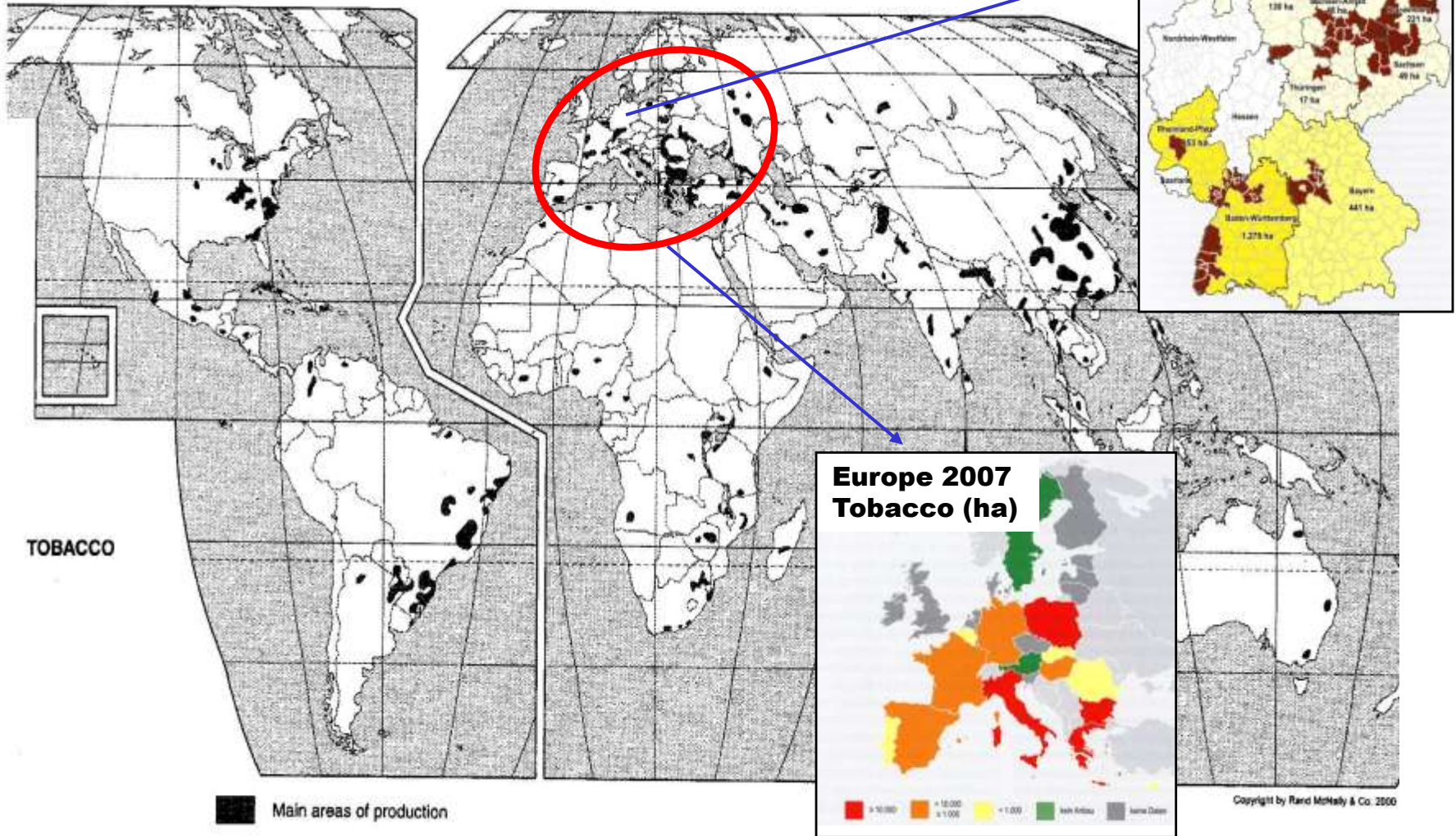
1974-2010=36 yrs

→ **terminal crisis?**  
[financialisation]

- Def – various approaches to investigate a historically specific set of relationships, norms, institutions and rules around which the expectations of all key actors converge
- Systemic regime cycles: 25-40 yrs
  - operative = “stabilized” (“boom”) – *eg 1947-1973*
  - transitional = crisis (“bust”, collapse) – *eg since 1973*

# Structural analysis


*Growing areas-growers-cultivation*





# Europe's global share [2007] 4% land (5% prod)

FAO 2008, UNITAB 2008

<u>EU-27</u>			<u>non-EU</u>		
1.	Belgium	64 ha	1.	Albania	1.2K ha
<b>2.</b>	<b>Bulgaria</b>	<b>29.9K ha</b>	2.	Belarus	820 ha
3.	Cyprus	100 ha	3.	Bosnia & Hercegovina	2.3K ha
4.	France	6.7K ha	4.	Croatia	5.3K ha
 5.	Germany	3.3K ha	<b>5.</b>	<b>Macedonia</b>	<b>17.2K ha</b>
<b>6.</b>	<b>Greece</b>	<b>15.9K ha</b>	6.	Moldova	3.4K ha
7.	Hungary	5.8K ha	7.	Montenegro	200 ha
<b>8.</b>	<b>Italy</b>	<b>26.1K ha</b>	8.	Russian Federation	10 ha
<b>9.</b>	<b>Poland</b>	<b>17.5K ha</b>	9.	Serbia	8.0K ha
10.	Portugal	479 ha	10.	Switzerland	511 ha
11.	Romania	1.4K ha	11.	Ukraine	500 ha
12.	Slovakia	656 ha			
13.	Spain	9.9K ha			
-----			-----		
<b>Total</b>		<b>117.9K ha</b>	<b>Total</b>		<b>39.5K ha</b>

- *4th Largest producer globally (after China, Brazil, India)*
  - *But - tobacco in all agricultural land < 0.2%*

# Survey 2007 Aug-Oct

- 540 farmers registered
- 160 farmers contacted
- 56 responded (12.4%)
- 25 respondents [panel study]  
Germany-Brazil-Tanzania-Taiwan



Geist et al, Land Use Policy 26 (2009)  
[free copies of publication]

## 1-Grower's background information

1. Age? <40/40-49/50-60/>60
2. Education level? Illiterate/<6 years of education/6-9/10-12/>12
3. Which type of tobacco currently? Flue (ha)/other to be specified (ha)
4. How many kilograms of all tobacco production last year? Flue/other
5. Generations (1/2/3/>3) and years in tobacco farming?  
<5/6-10/11-15/16-20/>20
6. Land ownership? Sole owner/joint owner/renter/mix of above
7. Have you abandoned tobacco farming during the past 10 years? Y (why?)/N
8. Will you consider switching from tobacco to another land use type? Y/N  
(reasons to be specified)

## 2-Land, labour, livelihood

9. Number and type of persons involved in farming? Family members (incl. children)/dependents/workers
10. Size of all landholding (ha)?
11. Which other crops (ha)?
12. Which type of fallow, if any (ha)?
13. Crop rotation back to 2000 for your biggest tobacco plot (2000/2001, etc.)?
14. Bottlenecks of production (land, labour, land rights)?
15. Tobacco income enough to cover household expenses? Enough/usually enough/not enough.
16. Enough capital to pay for the farming costs? Enough/usually enough/not enough.
17. Estimated share of tobacco in all household income back to 2000 (2000/2001, etc.)? All/half/<half
18. Income from other sources? Y (to be specified)/N
19. Any problems with the health of persons in respect of tobacco growing?

## 3-Husbandry and curing practices

20. Which energy is used to cure tobacco? Coal/wood/other
21. Sources of wood and types of trees (if so)?
22. How many kilograms (cubic meters) of wood/coal for all last year's cured (flue) production?
23. How many kilograms (cubic meters) of wood/coal for one curing charge (filled barn)?
24. How many curing charges for all last year's (flue) production?
25. How are curing and grading barns constructed? Brick/wood/others
26. Change in number of trees in your local area? Rise/fall/no change
27. Which type of trees on tobacco plot (if any)?
28. Which chemical inputs on plot (basal/top dressing) and seedbed?  
Fertilizer/pesticides/other
29. Soil problems and/or plant diseases?

## 4-Credit, marketing and diversification

30. Tobacco sold to which agencies/intermediate buyers?
31. Will children continue with tobacco farming?
32. Which major problems you expect when shifting away from tobacco?
33. Last season's credit situation? State/private lender/other



# *From farm to factory*

*Pictures by H Geist*





**Mainly middle-aged, well educated, highly experienced (“professional”), full-time farmers...**

Characteristics of tobacco growers, number of years (N = 100).

	Brazil	Tanzania	Taiwan	Germany	Total
Age					
<40	2	8	2	7	19 (%)
40–49	14	7	2	8	31 (%)
50–60	8	6	1	5	20 (%)
>60	1	4	20	5	30 (%)
(Formal) Education					
None	0	0	1	0	1 (%)
<6	21	5	8	1	35 (%)
6–9	4	13	8	3	28 (%)
9–12	0	1	7	6	14 (%)
>12	0	3	1	15	19 (%)

Source: Own farming systems survey.

Experience in tobacco farming (N = 100).

	Brazil	Tanzania	Taiwan	Germany	Total
Full time	14	25	17	20	76 (%)
Part time	11	0	8	2 <sup>a</sup>	21 (%)
Years					
<5	1	5	0	4	10 (%)
6–10	0	7	0	2	9 (%)
11–15	1	3	1	3	8 (%)
16–20	1	3	3	3	10 (%)
>20	20	7	21	13	61 (%)

Source: Own farming systems survey.

<sup>a</sup> No answer in 3 cases.

Tobacco landholdings (all varieties and systems of cultivation).

	Minimum	Maximum	Mean	Share in all
All operations				
Brazil	1.0	23.0	11.5	100%
Tanzania	5.5	75.0	18.6	100%
Taiwan	0.5	2.9	1.5	100%
Germany	0.3	260.0	56.5	100%
Tobacco operations				
Brazil	0	>50	2.5	22% <sup>a</sup>
Tanzania	1.0	6.0	4.2	23%
Taiwan	0.2	5.0	1.1	73%
Germany	0.3	212.0	22.1	39%

Source: Own farming systems survey; AFUBRA (2007); CSCPF (2007).

<sup>a</sup> 16% according to SINDIFUMO (2007) and 15% according to AFUBRA (2007).

**...with comparatively large [specialised] tobacco holdings**

*Europe – ca 1.5ha*

Hungary – 4.3 ha

Portugal – 3.5 ha

Spain – 3.0 ha

Italy – 3.0 ha

France – 2.4

Borsos et al 2008

# Specialised tobacco operations

<b>Special crops</b> <i>n=25</i> Tobacco[*]-vegetable-herbs	<i>min</i> 0.3 ha	<i>max</i> 212.0 ha	43%
<b>Cereals</b> <i>n=21</i> Maize-wheat-barley-rye-oats	6.0 ha	50.0 ha	40%
<b>Non-arable</b> <i>n=14</i> Pasture-meadow-fallow	1.0 ha	40.0 ha	9%
<b>Tuber crops</b> <i>n=11</i> Potatoes-beetroot	0.5 ha	20.0 ha	6%
<b>Legumes</b> <i>n=2</i> Rapeseed	9.0 ha	13.5 ha	2%

[\*] Two farms with 100% tobacco operations.

# Relational analysis

*Functions-Actors-Networks-Markets*

<i>Net exporter</i>	Greece, Italy
<i>Self-contained</i>	Bulgaria
<i>Net importer</i>	Croatia, Hungary, Austria, Belgium, Cyprus, France, <b>Germany</b> , Poland, Romania, Russia, Slovakia, Ukraine, Portugal, Spain, Switzerland
<i>Full importer</i>	Estonia, Lithuania, <b>Czech Republic</b> , Slovenia, Luxembourg, Denmark, Finland, Ireland, Netherlands, Norway, Sweden, United Kingdom



# The global cigarette needs ...

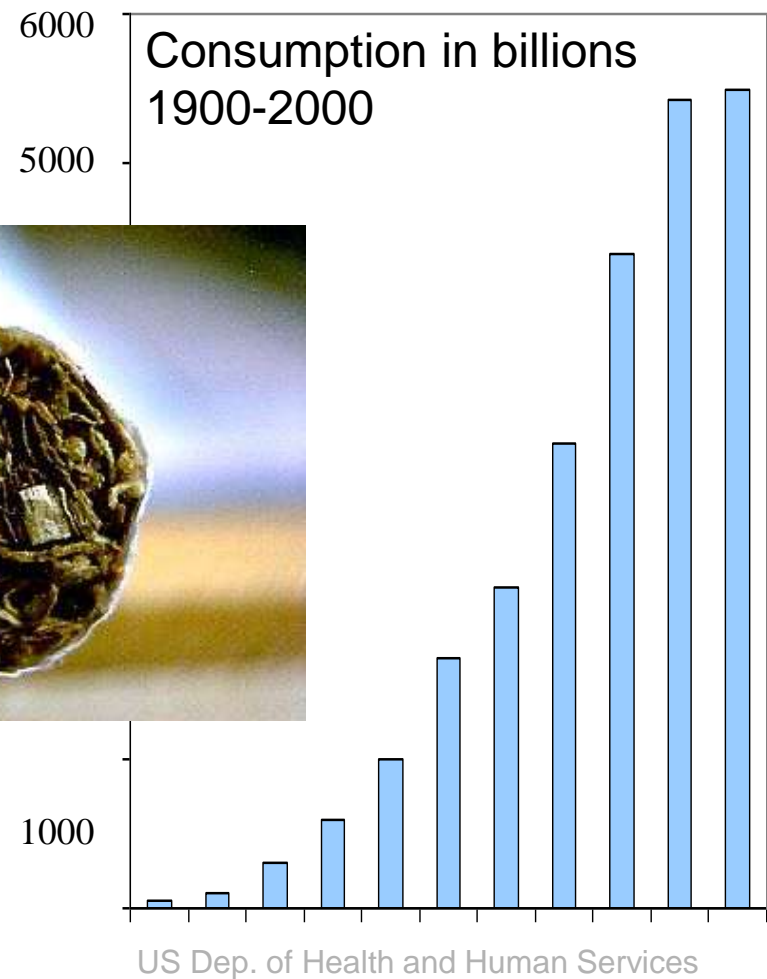
- western-style, *American Blend*
- machine-made
- white stick
- filter-tipped
- ‚mild‘/‚light‘

## **Facts**

- >80% of all tobaccos worldwide are produced for cigarettes
- No of smokers will increase from 1.1 to 1.7 billion [until 2025] .



Cox 2005



# ... global tobaccos



~**50%** **Flue(-cured) or**  
**(bright) Virginia**

– dried artificially  
(heated air)



~**35%** **Burley**

– air-cured

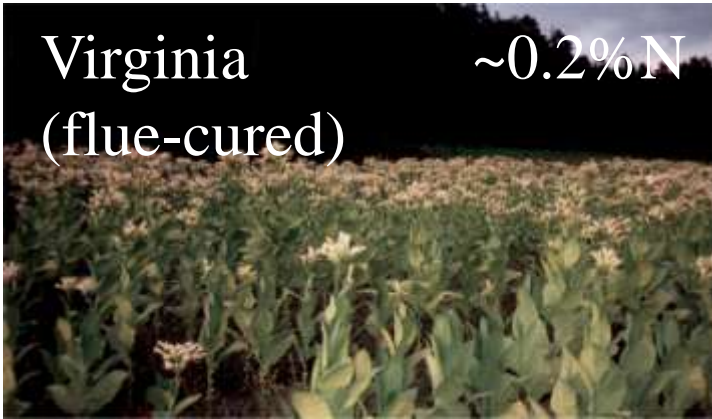


~**15%** **Oriental**

– air- or sun-cured

Virginia  
(flue-cured)

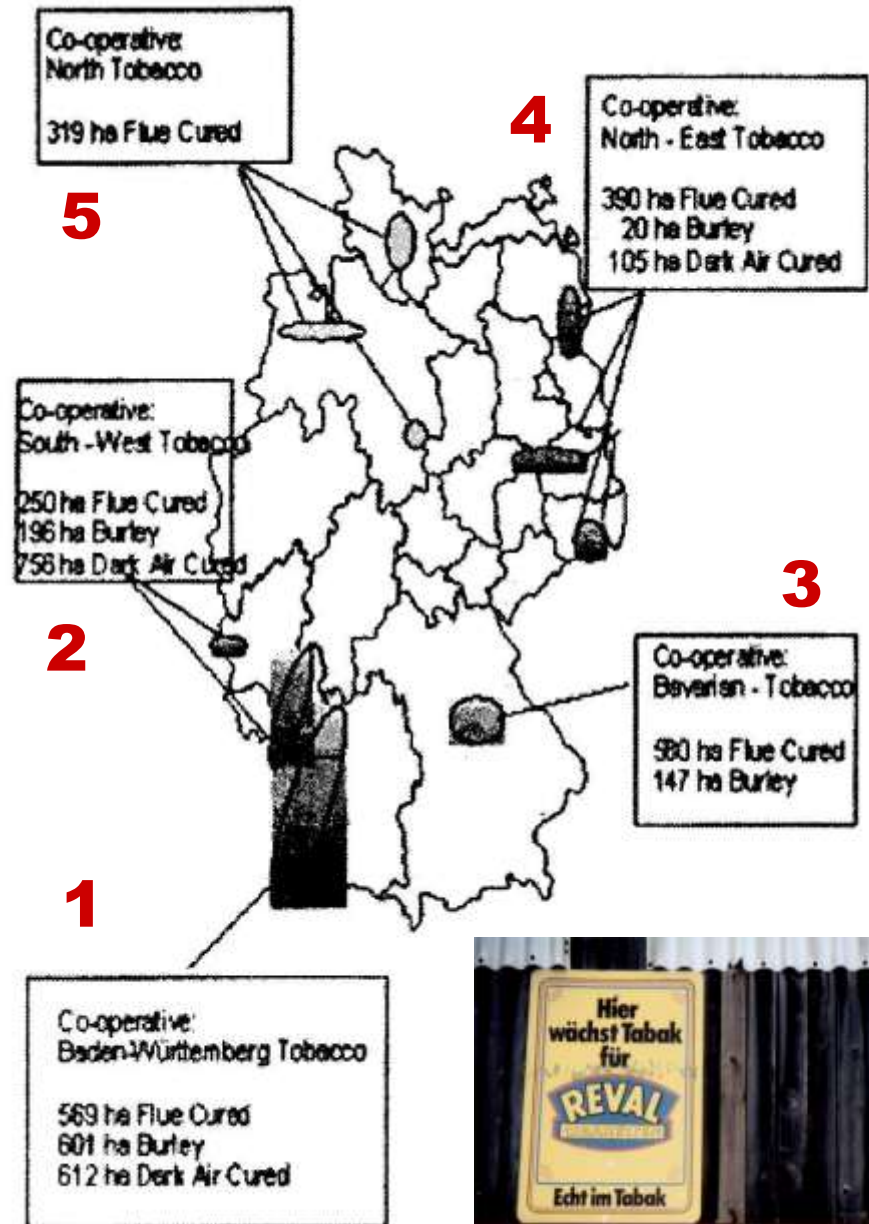
~0.2%N



Burley ~0.1%N



Geudertheimer  
(dark air-cured)





# Tobacco exports [1995] from Malawi (in kg)

	Burley	Flue-cured	Dark Fire-cured	Sun-cured	Oriental	TOTAL
EU-25	5,071,825 57%	4,002,432 88%	470,016 100%	42,366 100%	554,057 100%	10,140,696 70%
Germany	1,581,910	211,300	10,000	200	357,247	2,160,657
United Kingdom	48,560	2,017,382	33,692	14,166	0	2,113,800
Czech Republic	1,516,000	0	0	0	0	1,516,000
Poland	204,960	814,400	100,000	0	196,810	1,316,170
Hungary	439,605	291,360	0	0	0	730,965
Denmark	376,130	264,360	0	28,000	0	668,490
Spain	501,120	9,600	63,000	0	0	573,720
Belgium	45,880	226,830	263,324	0	0	536,034
Italy	357,660	167,200	0	0	0	524,860
Other Countries	3,870,028 43%	522,250 12%	0 0%	0 0%	0 0%	4,392,278 30%
Turkey	1,201,720	0	0	0	0	1,201,720
USA	909,628	138,850	0	0	0	1,048,478
Russia	1,008,000	0	0	0	0	1,008,000
Philippines	611,760	0	0	0	0	611,760
South Africa	138,920	383,400	0	0	0	522,320
<b>TOTAL</b>	<b>8,941,853</b>	<b>4,524,682</b>	<b>470,016</b>	<b>42,366</b>	<b>554,057</b>	<b>14,532,974</b>



**2 global businesses  
buy up 95% of  
national tobacco +  
sell it to 3 global  
cig manufacturers**

Source: TAMA Country Statement (24 October 1995)

# ***Leaf trade globalization***

- **Early start** – 1902 Export Leaf Tobacco (BAT), 1918ff Universal Leaf Tobacco (ULT), Standard Commercial (Stancom), Monk-Austin, Dibrell Brothers etc
- **Early leaf cartel** – strategic investments in foreign markets → pattern set for global expansion
- **Modern global industry since 1990s**
  - rise of the global [*American Blend*] cigarette (eg Marlboro)
  - „Washington Consensus“: privatization + deregulation + trade liberalization → dismantling of state monopolies & cooperatives [*except China and Turkey*] → intrusion of „global businesses“
- **„End game“ of corporate growth** – acquisitions, mergers
  - 2000 – Monk-Austin+Dibrell Brothers → Dimon
  - 2005 – Stancom+ULT → Alliance One International

# ***Result***

**Consolidation at the global level of (few=2) tobacco merchants [AOI, Dimon] with (few=4) cigarette manufacturers [PM, BAT, JT, IT] in a tobacco oligopole which is a joint leaf/cigarette price-fixing cartel**

## ***How does the cartel operate?***

*[a]* Leaf co.s use advance payments from cigarette co.s for services to contracted farmers to secure delivery of „cheap“ tobacco to manufacturers (land, labour)

*[b]* Merchants & manufacturers cooperate in the design of (few) global primary growing areas („tobacco clusters“) for the production of B&V in the Global South [90% of tobacco land] eg Yunnan/China & S-Brazil [V], Malawi [B]



# Dynamics of change

*Tobacco Policy-Corporate Decisions-Capital Mobility*



# Germany, a brief history of change

- 17<sup>th</sup>C – start of commercial production [*first reported 1573*]
- Late 19<sup>th</sup>C – “peak tobacco” (mass production)
- Since then, continuous decline of area/prod [*←import from overseas*]
  - Area: 30K [*1870*] → 7K [*1974*] → 3K ha [*2008*]
  - Growers: ~200K [*1870*] → 1K [*2002*] → ~450 [*2007*]
- Self-contained industry until 1960s [*“Beimischungszwang”*]  
→ net importer
- Small-scale → specialised farming
  - tobacco landholdings – 0.2 [*1870*] → 4 [*2000*] → 22 ha [*2007*]
  - tobacco shares – ~16% [*2000*] → 33% [*2005*] → 43% [*2007*]

**...so what should trigger collapse?**

# German Tobacco Farmers Face Gloomy Future

**Germany's tobacco growers are in crisis mode. With EU subsidies due to stop in 2009, it's predicted the crop will die out. And given the current anti-smoking climate, there's not a lot of sympathy for the farmers.**

Farmer Markus Fischer is the fourth generation in his family to grow tobacco, and he'll probably be the last. About a sixth of his 150-hectare (370-acre) farm in the southern Palatinate region of Germany is currently dedicated to tobacco, the farm's main source of income. But Fischer isn't sure what the future holds.

Tobacco is a highly subsidized crop in Europe. Farmers earn around 1.20 euros (\$1.40) per kilo, and the EU pays about two euros per kilo on top of that.

As part of the EU's agricultural shake-up, these subsidies will be complete at the end of 2009, which will probably mean the end for Germany's 450 tobacco farmers.

"We can't cover our overheads without the subsidies," Fischer said.





# *Trigger 1* – FCTC=International Framework Convention on Tobacco Control

Article 3	Objective
Article 4	Guiding principles
Article 5	General obligations
Article 6	Price and tax measures to reduce the demand for tobacco
Article 7	Non-price measures to reduce the demand for tobacco
Article 8	Protection from exposure to tobacco smoke
Article 9	Regulation of the contents of tobacco products
Article 10	Regulation of tobacco product disclosures
Article 11	Packaging and labelling of tobacco products
Article 12	Education, communication, training and public awareness
Article 13	Tobacco advertising, promotion and sponsorship
Article 14	Demand reduction measures concerning tobacco dependence and cessation
Article 15	Illicit trade in tobacco products
Article 16	Sales to and by minors
Article 17	Provision of support for economically viable alternative activities
Article 18	Protection of the environment and the health of persons
Article 19	Liability
Article 20	Research, surveillance and exchange of information
Article 21	Reporting and exchange of information
Article 22	Cooperation in the scientific, technical and legal fields and provision of related expertise
Article 26	Financial resources



2005



# Collapse in countries which ratified FCTC?


*% change of tobacco land, 1974/2008*

## EU-27

*FCTC Collapse*

## non-EU

*FCTC Collapse*



1.	Austria	2005	<b>2006</b>
2.	Belgium	2005	<b>-67%</b>
3.	Bulgaria	2005	<b>-80%</b>
4.	Cyprus	2005	<b>+100%</b>
5.	France	2004	<b>-70%</b>
6.	Germany	2004	<b>-55%</b>
7.	Greece	2006	<b>-81%</b>
8.	Hungary	2004	<b>-65%</b>
9.	Italy	2008	<b>-29%</b>
10.	Poland	2006	<b>-67%</b>
11.	Portugal	2005	<b>-92%</b>
12.	Romania	2006	<b>-98%</b>
13.	Slovakia	2004	<b>-98%</b>
14.	Spain	2005	<b>-30%</b>

1.	Albania	2006	<b>-93%</b>
2.	Belarus	2005	no data
3.	Bosnia & H.	2009	no data
4.	Croatia	2008	no data
5.	Macedonia	2006	no data
6.	Moldova	2009	no data
7.	Montenegro	2006	no data
8.	Russian Fed.	2008	no data
9.	Serbia	2006	no data
10.	Switzerland	[2004]	<b>-28%</b>
11.	Ukraine	2006	no data

Scope for new research?

## *Trigger 2*

## Neoliberal CAP reform (EC)

**Pre/neoliberal – “regulated tobacco market” with production quota + “premiums”** [*~70% of final product price*]

- **2003** – start of routine CAP reform [*deregulation*] with objective that producers should adjust to a situation where support is phased out [*decision taken in 2004*]
- **2006-2009**: Reduction of subsidies to 50%
- **2010-2013**:  $\frac{1}{2}$  of production subsidy  $\rightarrow$  flat-rate area subsidy +  $\frac{1}{2}$  spent for state-managed “tobacco fund” [*eg for conversion, diversification etc*]

**Post-neoliberal – full decoupling of support from production (= deregulated, “free” tobacco market)**

# Conclusion

- Theoretical considerations  
*GLP 2005 - GAR theory*
- Practical implications  
*Which options in the future?*