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Rice Markets of the America's: An Analyst View

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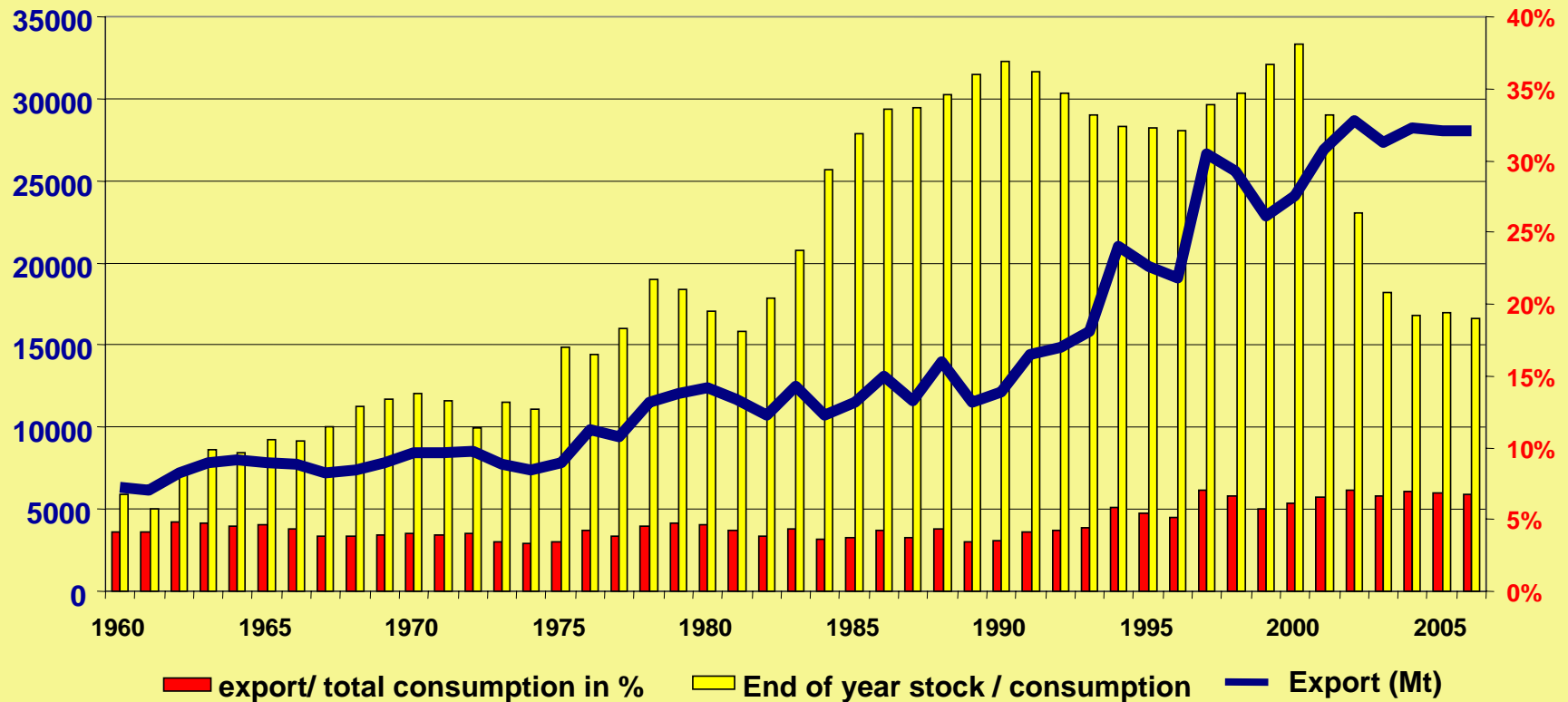
Plan of the presentation

- 1. Main features of world rice trade**
- 2. Feature and Trends of the Americas rice economy**
- 3. Constraints and opportunity for rice production expansion**
- 4. Few considerations on prevailing issues for long term prospects**

Rice worldwide demand and supply

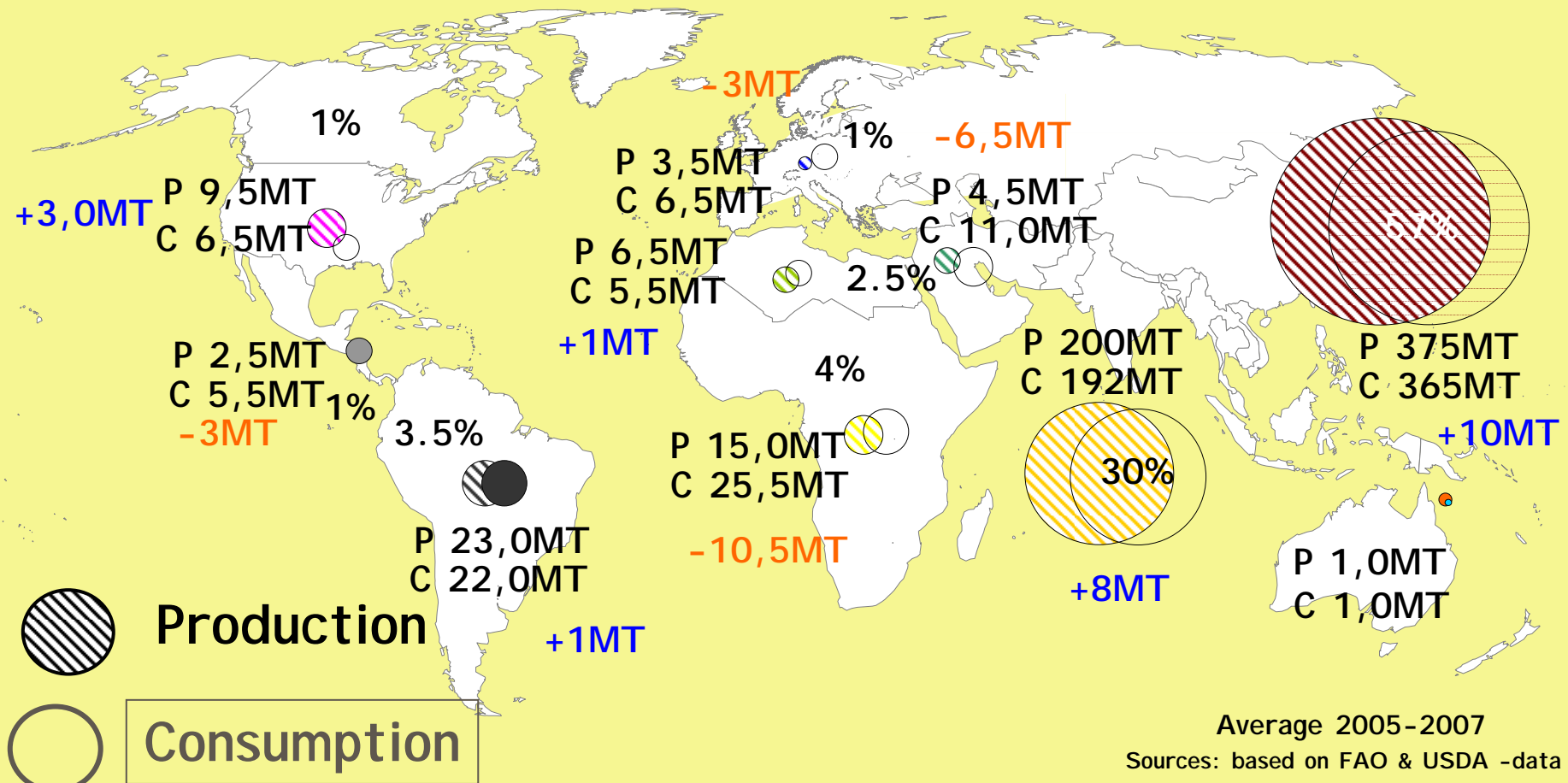
- ⌘ A relatively small market (less of 30 millions tons) ; wheat (115Mt) ; corn (90Mt)
- ⌘ Smaller share of global rice production is traded (about 7%) ; wheat (19%) ; corn (13%)
- ⌘ Global rice consumption & export is highly concentrated in Asia (88% of consumption & 77% of exports)
- ⌘ Annual growth 3,4% (1961-2005)

Trends in rice trade and stock volume



source: based on USDA -data

Rice world supply and demand distribution

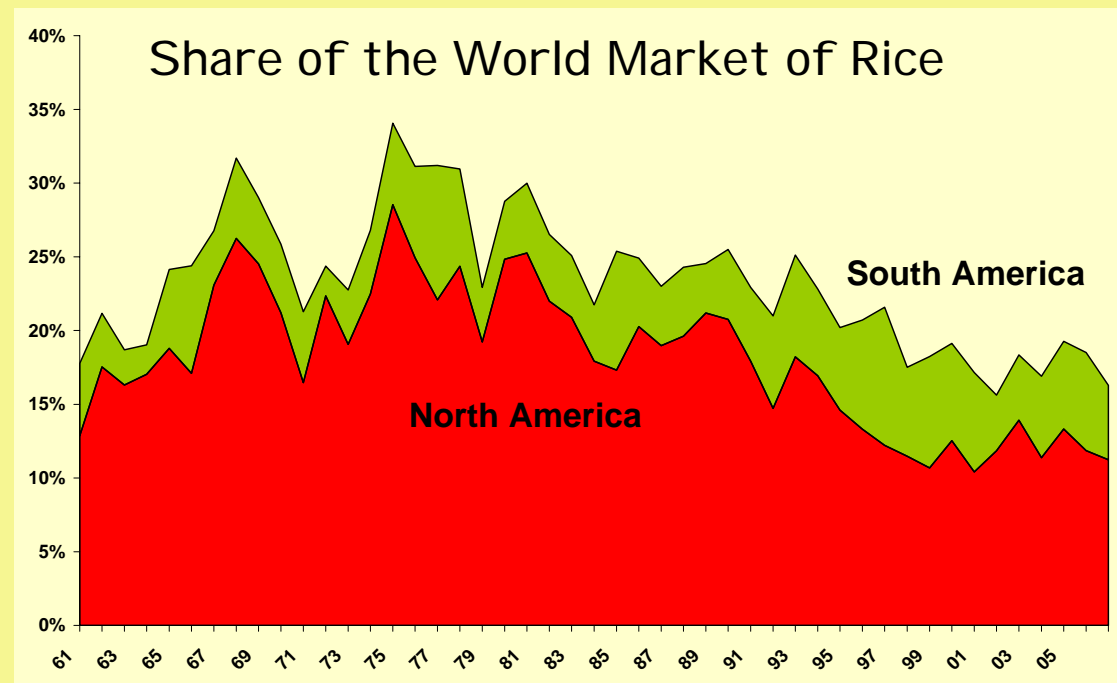


Rice Outlook in the Americas

- ⌘ Rice production represent 5% of worldwide production
- ⌘ **Rice imports: nearly 15% worldwide trade**
 - ⊞ Central America & Caribbean: main importers, more of 50% of total demand for the area ; all countries are rice importers ; recent years, rice imports have exceed 2 MT annually (3MT paddy rice)
 - ⊞ South America: 25 – 30% total demand for the area
 - ⊞ North America: 20 – 25% total demand for the area
- ⌘ **Rice exports: nearly 20% worldwide trade**

Rice Export in the Americas

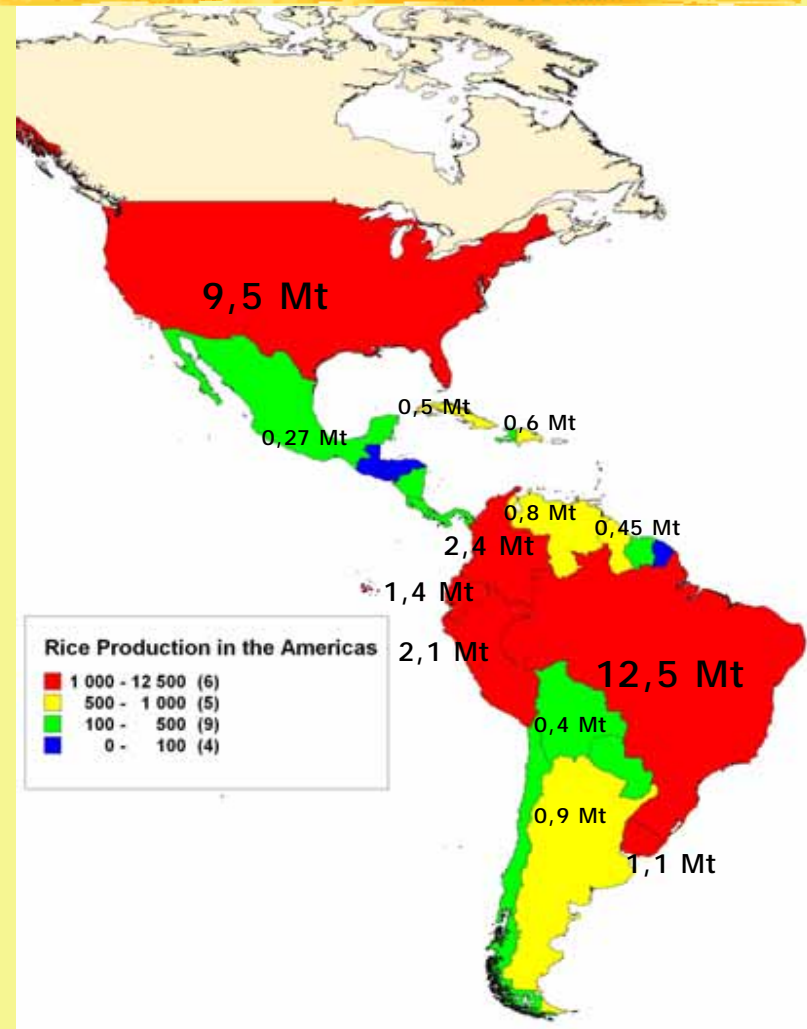
- ⌘ Rice exports: nearly 20% worldwide trade
 - ☒ **North America:** 12% worldwide exports ; **share** of the world market for **rice** has generally dropped since the mid-1970s (emergence of India and Vietnam as worldwide exporters)
 - ☒ **South America:** 5% worldwide exports ; **share** of the world market for **rice** between 5 - 8%



US Share : more 29% in 1975 ; less 10% in 2001

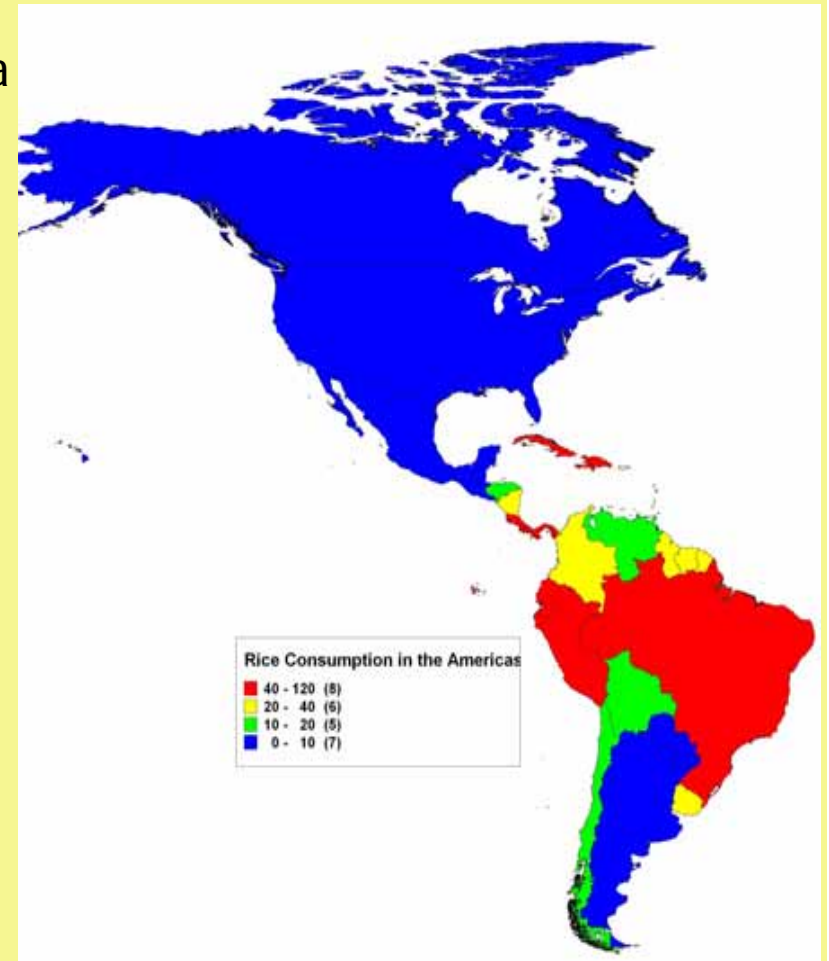
Rice Producers in the Americas

- ⌘ Rice is cultivated in almost every countries, except Canada.
- ⌘ Brazil, USA, Colombia, Peru, Ecuador & Uruguay are the larger producers
- ⌘ Argentina, Venezuela, Cuba, Dominican Rep. & Guyana are other important rice producing countries
- ⌘ Small producing countries are in Central America, Haiti, Bolivia, Chile, Paraguay & Suriname



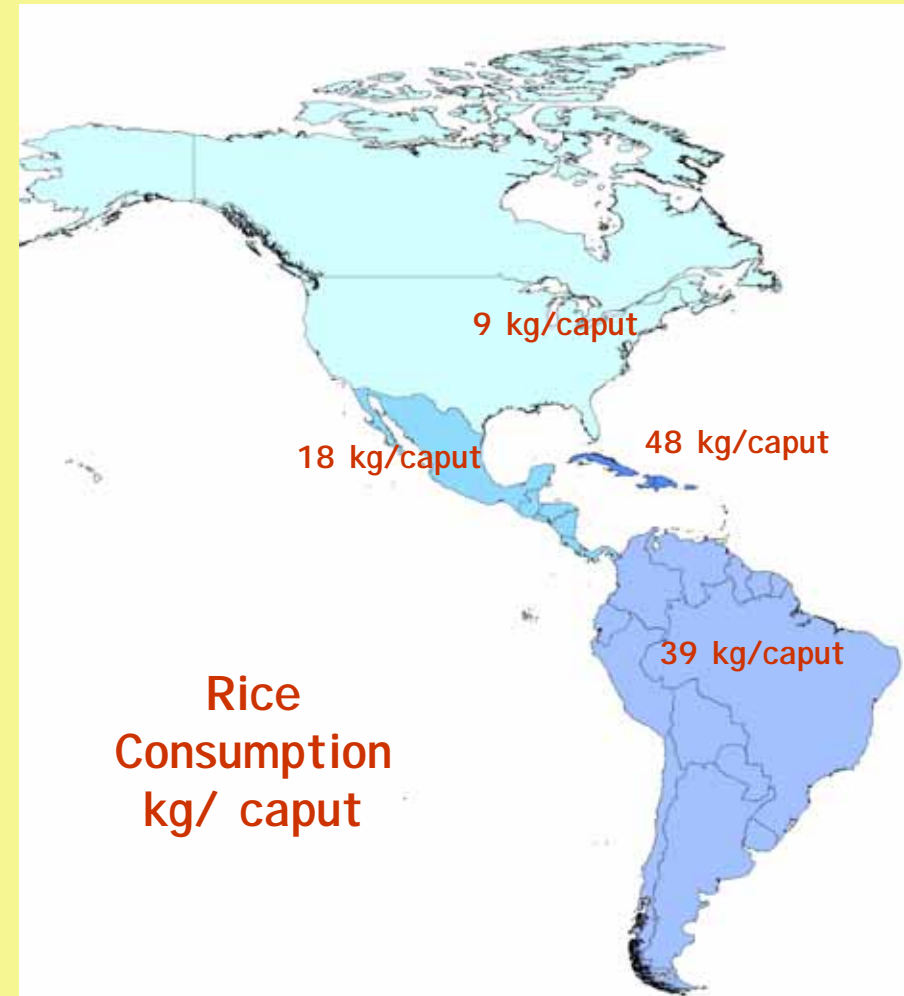
Rice Consumers in the Americas

- ⌘ **High rice consumers** (kg/cap): + 35 kg.
 - ⊞ Cuba (72 kg); Costa Rica (53 kg); Panama (60 kg); Dominican Rep (50 kg) Ecuador (47 kg); Haiti (47 kg); Peru (45 kg) ; Brazil (43 kg)
- ⌘ **Middle high**: 20 to 33 kg.
 - ⊞ Colombia (33 kg) ; Nicaragua (30 kg) ; Guyana (23 kg); Suriname (25 kg) ; Uruguay (22 kg)
- ⌘ **Middle low** : ~ 20 kg
 - ⊞ Venezuela (19 kg) ; Bolivia (20 kg) ; Honduras (18 kg)
- ⌘ **Low consumers** : - 12 kg.
 - ⊞ Chile (12 kg.), Canada (10 kg); El Salvador (10 kg); Argentina (10 kg); USA (9 kg) ; Mexico (6 kg); Guatemala (5 kg)

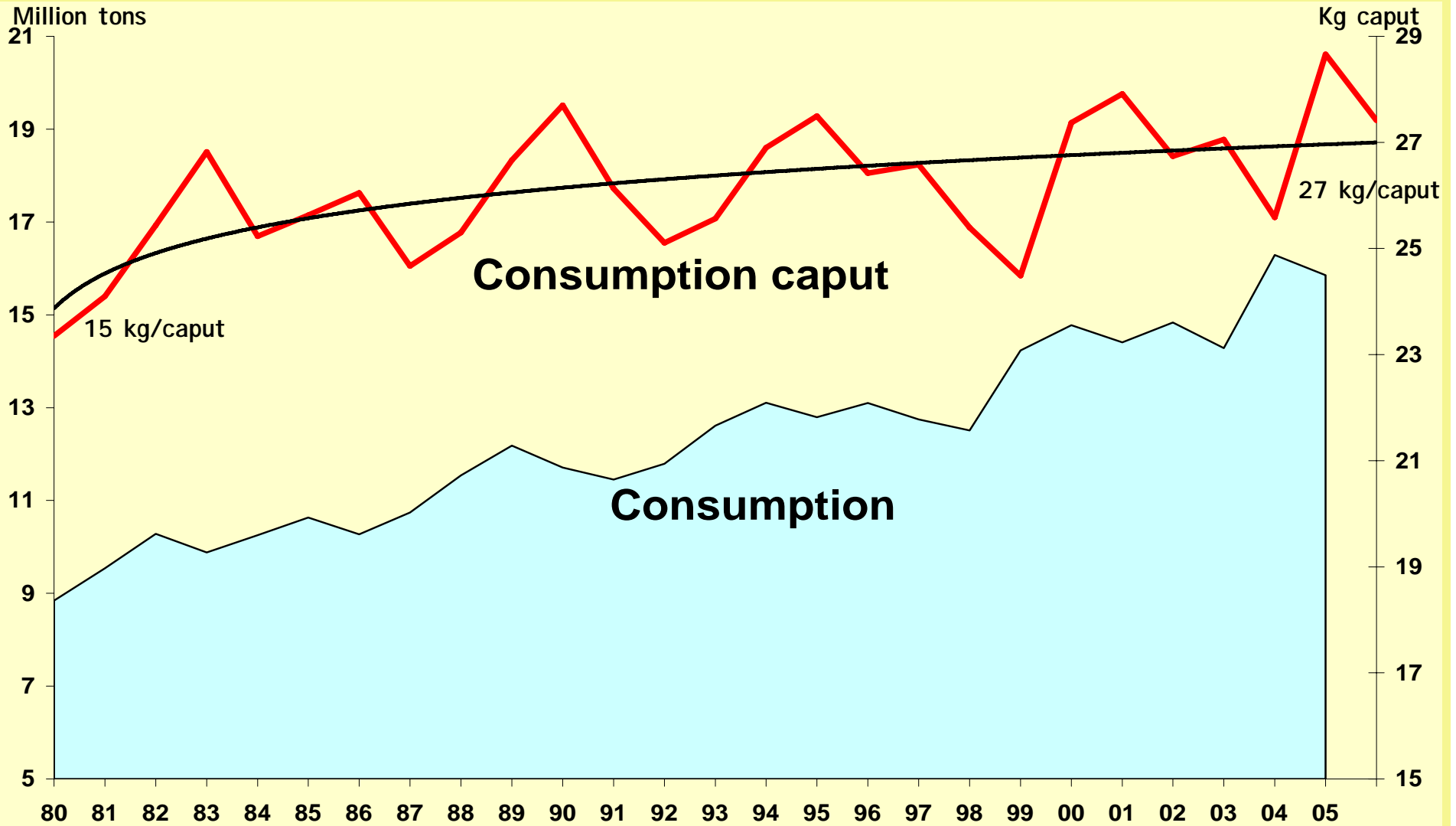


Consumption by regions in the Americas

⌘ In Central America, rice consumption is low (18 kg/caput) compared to the Caribbean (48 kg/caput) and South American countries (39 kg/caput), North America (9 kg/caput); and 27 kg/caput for average Americas



Rice Consumption Trends in the Americas



Rice Trade in the Americas: Large discrepancies between countries

Larger Rice Deficit (more than 100.000 t)

Cuba, Brazil, Canada
Mexico, Haiti, Costa Rica,
Nicaragua, Dominican Rep.
Colombia, Chile

Minor Rice Deficit

Peru, Panama, Guatemala
Venezuela,

Self-suppliers

Bolivia, Paraguay, Ecuador
Suriname

Larger Rice Exporters

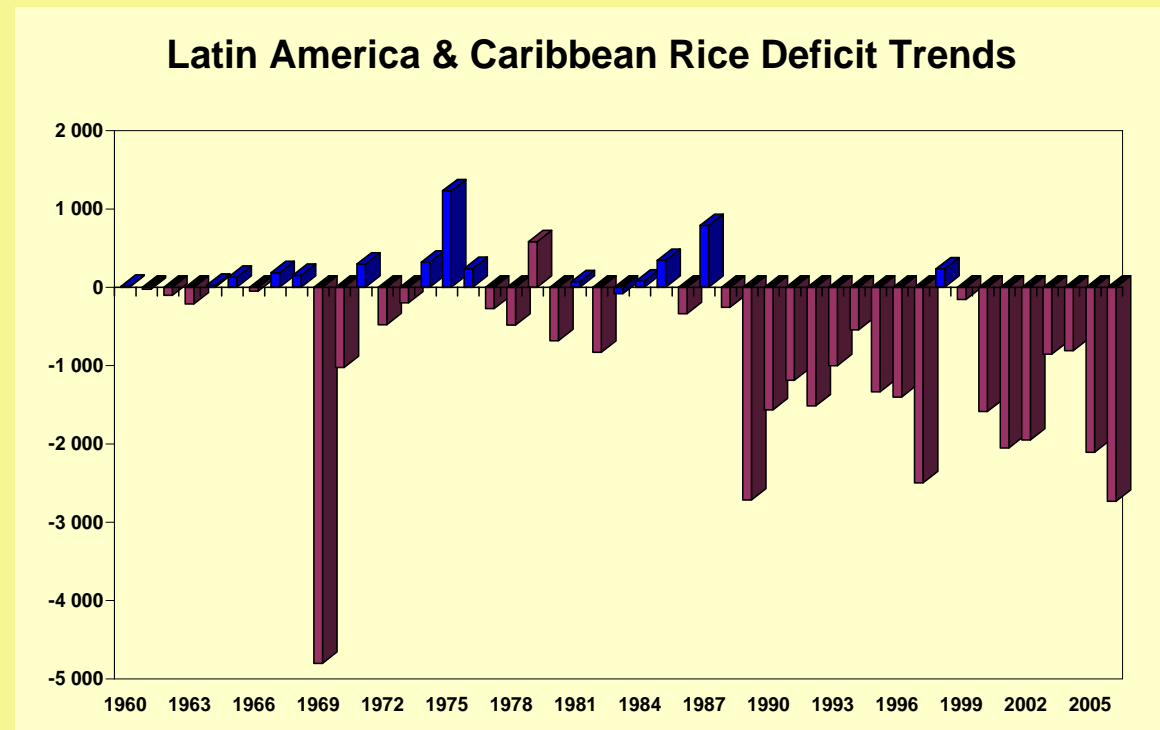
USA, Uruguay, Argentina,
Guyana



Americas	Areas	Production	Yields	Net	Consumption
Countries	(000 t.)	Rice Paddy (000 t.)	T/ha	Imports/ Export (000 t.)	kg/caput
Americas	7 380	33 880	4,59	640	27
North America	1 260	9 630	7,65	2 590	9
United States	1 260	9 630		2 920	9
Canada	-	-	-	-330	10
Central America	310	1100	3,3	-1 050	18
Costa Rica	330	203	3,8	-110	53
Panama	75	240	3,2	-30	60
Nicaragua	103	270	2,6	-125	30
Mexico	56	280	5,0	-600	6
Honduras	4	12	2,9	-100	18
El Salvador	4	20	5,0	-70	10
Guatemala	17	36	2,5	-60	5
Caribbean	310	1150	3,7	-1 200	48
Cuba	185	620	3,3	-700	72
Dominican Rep	85	415	4,9	-100	50
Haiti	40	110	2,6	-325	47
Jamaica	-	-	-	-130	49
Trinidad and T.	-	-	-	-57	44
South America	5 500	22 000	4,00	300	39
Brazil	3 600	12 500	3,48	-450	43
Peru	340	2 250	6,81	-80	45
Colombia	470	2 200	4,77	-100	33
Ecuador	380	1 200	3,20	50	47
Uruguay	180	1 200	6,50	750	22
Argentina	165	1 125	6,84	350	10
Guyana	125	487	3,87	200	23
Suriname	50	187	3,80	20	25
Venezuela	135	600	4,72	-22	19
Bolivia	145	400	2,70	-20	20
Paraguay	30	114	3,95	-7	8
Chile	26	120	4,70	-100	12

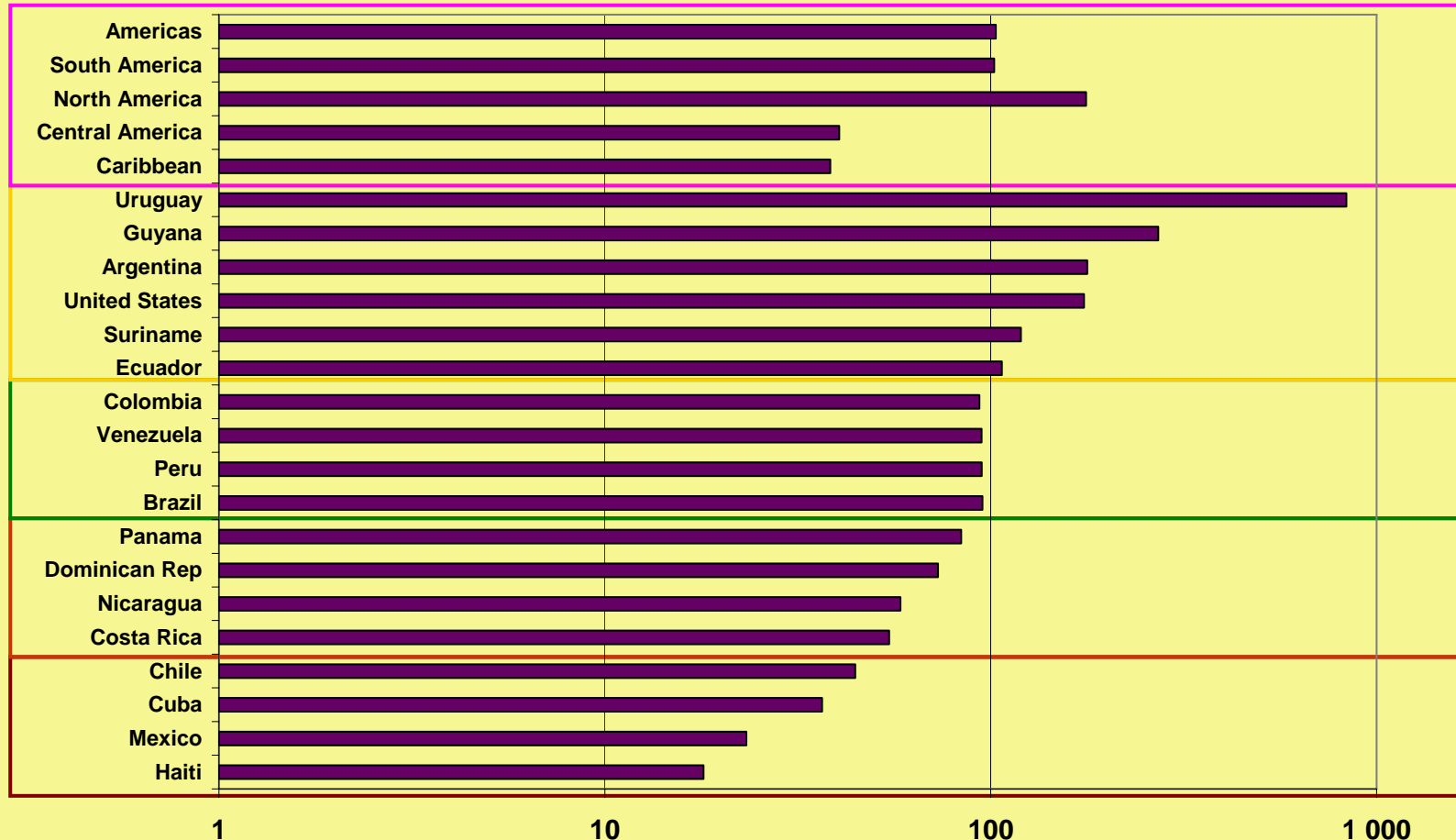
Rice Trends in LAC

- ⌘ While significant improvement in rice production in LAC, regional demand still exceed production
- ⌘ Net deficit 2001-2006 nearly 1,7 Mt of milled rice a year (2,5 Mt paddy), representing US\$500 millions a year



Rate of self-sufficiency

Average 2000-2005



Production/Consumptionx100

sources: based on FAO & USDA -data

Rice trade in Americas

⌘ Regional supply trends

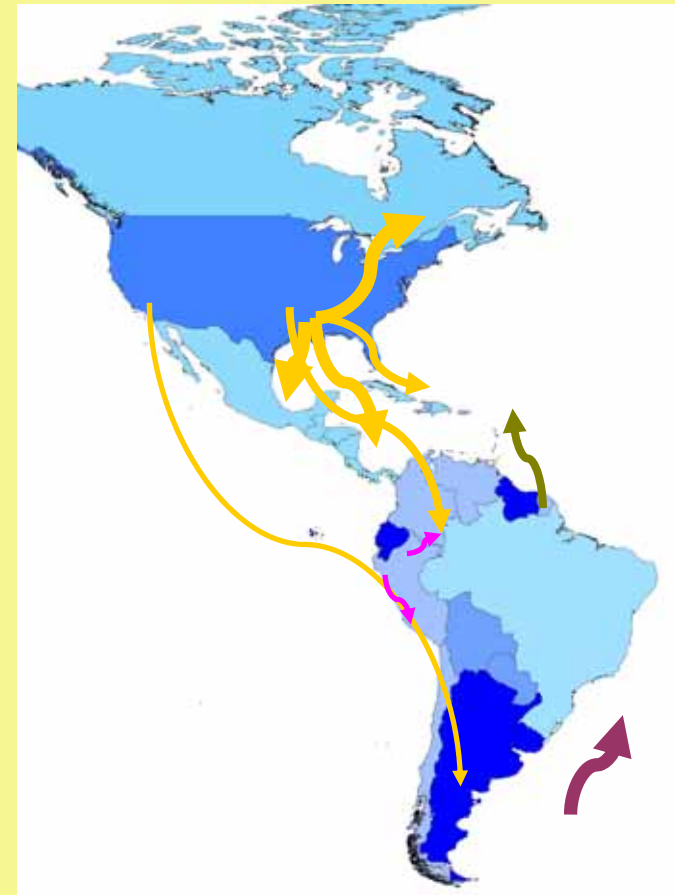
- ☑ USA (nearly 3Mt)
- ☑ Mercosur (Uruguay & Argentina, more 1Mt)
- ☑ Other origins ? (Guyana, Ecuador, Suriname, 0,3Mt)

⌘ Regional demand trends

- ☑ Central America (Mexico, Costa Rica, Nicaragua..., more 1Mt)
- ☑ Caribbean (Cuba, Haiti, Dominican Rep..., more 1Mt)
- ☑ Andin's countries (Peru, Colombia, Chile..., more 0,3Mt)
- ☑ Brazil (between 0,5Mt and 0,7Mt)

Rice Americas market is a regional market

- ⌘ Almost rice imports are supplied by **regional exporters**:
 - ☒ **USA** is a major exporter to Mexico and Canada
 - ☒ **Argentina and Uruguay** are major exporters to Brazil
 - ☒ **Guyana** is a major exporter to Jamaica and Trinidad & Tobago
 - ☒ **Ecuador** exports → Colombia & Peru

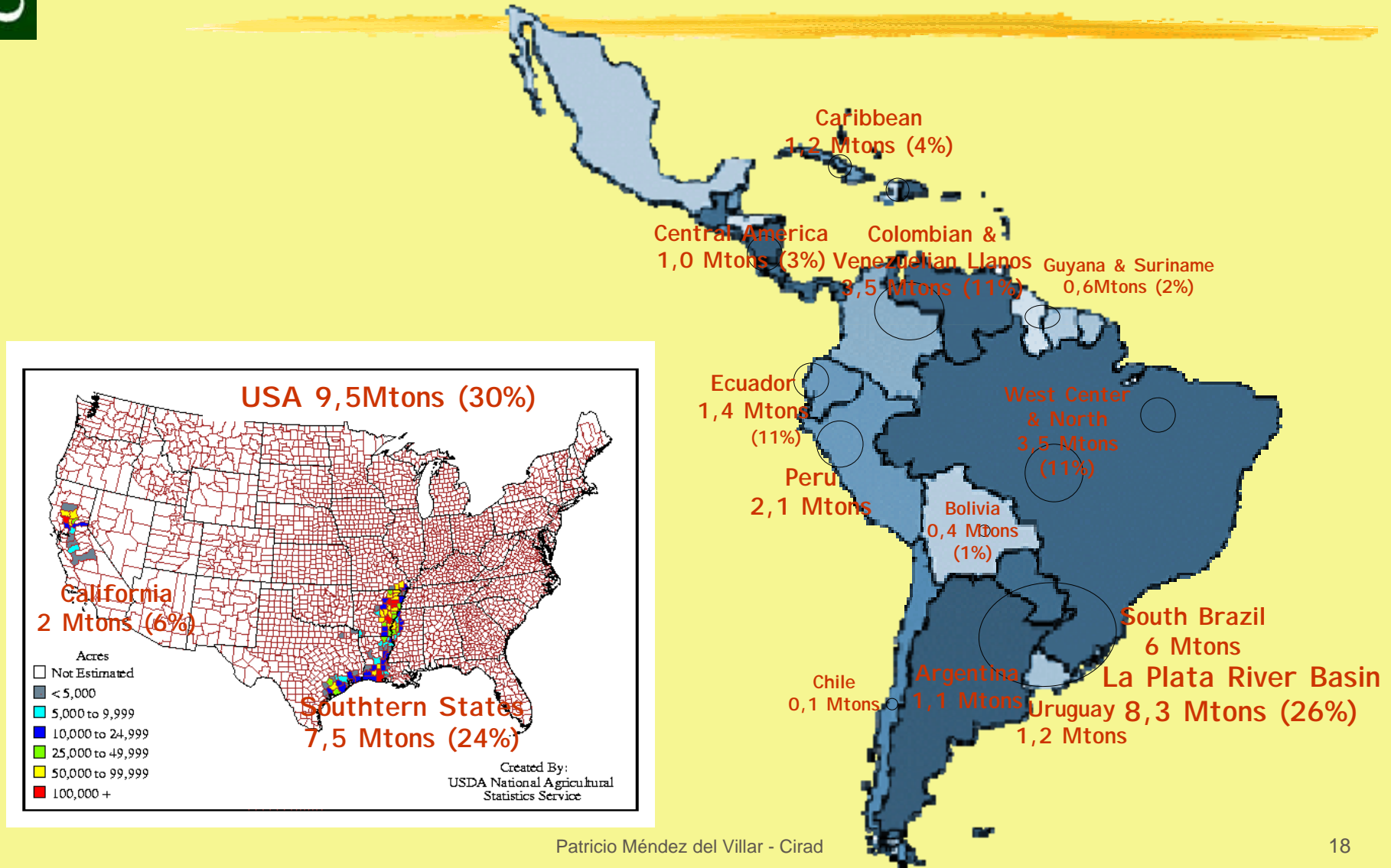


Variable export and import trade flows

Importer	type of rice	Origin
Mexico	Paddy	USA +++++
	Milled	USA +++
		Uruguay + China +
Brokens	USA +++++	
Colombia	Paddy	USA +++ Venezuela ++
	Milled	USA +++ Ecuador +++ Venezuela ++
	Brokens	Venezuela +++ Ecuador ++
Cuba	Paddy	USA +++++
	Milled	USA +++++ Spain +++ Vietnam ++
	Brokens	Vietnam +++ USA +++ Thailand ++
Brazil	Paddy	Paraguay +++++ Uruguay +++ Argentina +++
	Milled	Uruguay +++++ Argentina +++++
	Brokens	Uruguay +++++ Argentina +++

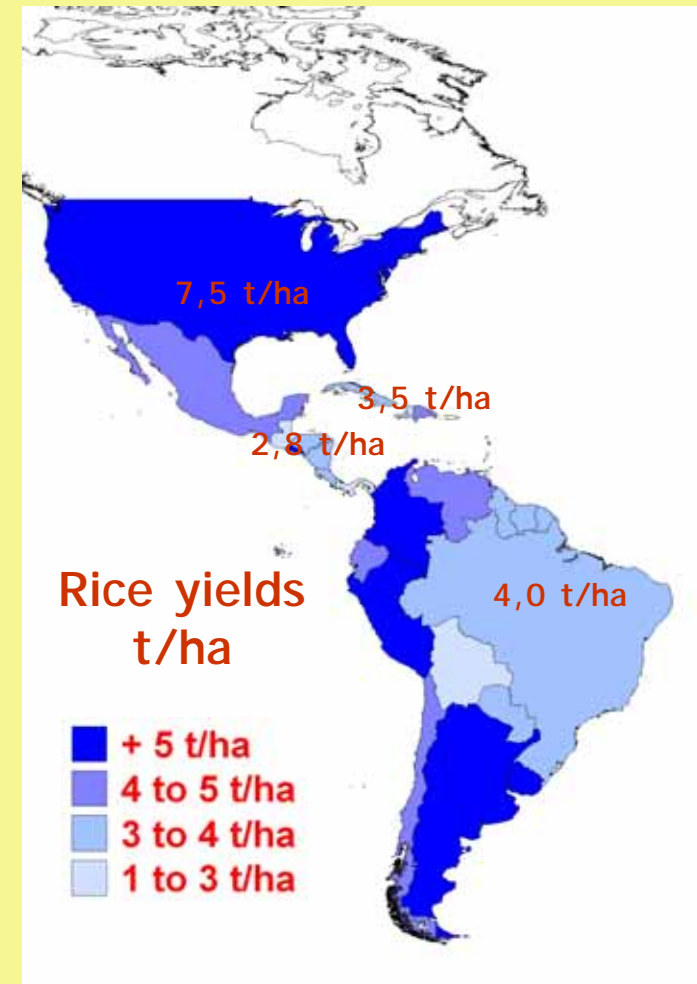
Importer	type of rice	Origin
Chile	Paddy	USA +++++
	Milled	Thailand +++++ Argentina +++ USA ++
		Brokens
Peru	Paddy	Italy +++++
	Milled	Uruguay +++ USA +++ Brazil ++ Bolivia ++
	Brokens	Ecuador +++++ Bolivia ++
Dominican Rep	Paddy	USA +++++
	Milled	USA +++++
	Brokens	USA +++++
Haiti	Husked	USA ++
	Milled	USA ++++++
Nicaragua	Milled	USA +++++
	Brokens	Central Am+++
Honduras	Paddy	USA ++++++
	Milled	USA ++
El Salvador	Paddy	USA +++++
	Milled	Italie +++ USA ++
	Brokens	Central Am+++
Guatemala	Paddy	USA ++++++
	Milled	USA + Italy + Argentina +

Rice Production in the Americas by Main Regions



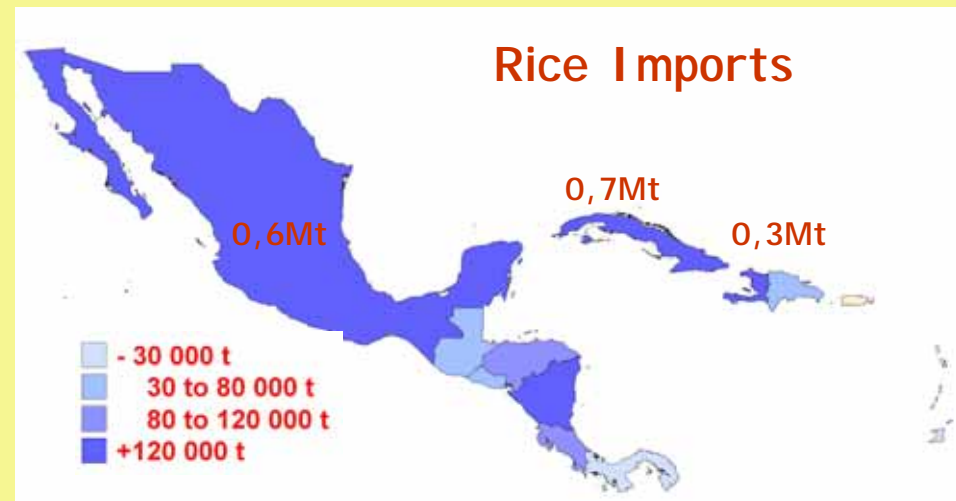
Rice Outlook in Central America & Caribbean countries

- ⌘ Although all **Central and Caribbean** countries are **net importers** of rice, domestic production has increased because of yields improvement only. **Dominican Republic** is the largest producer in the area and yields are also respectable (4,9t/ha) ;
- ⌘ However, average **yield** remains low at 3,5t/ha in **Caribbean** countries and 2,8t/ha in **Central America**, while average yield in **South America** are 4,0t/ha (and 5,0t/ha without Brazil) and 7,5t/ha in **USA**.



Central America & Caribbean countries: Major Importers

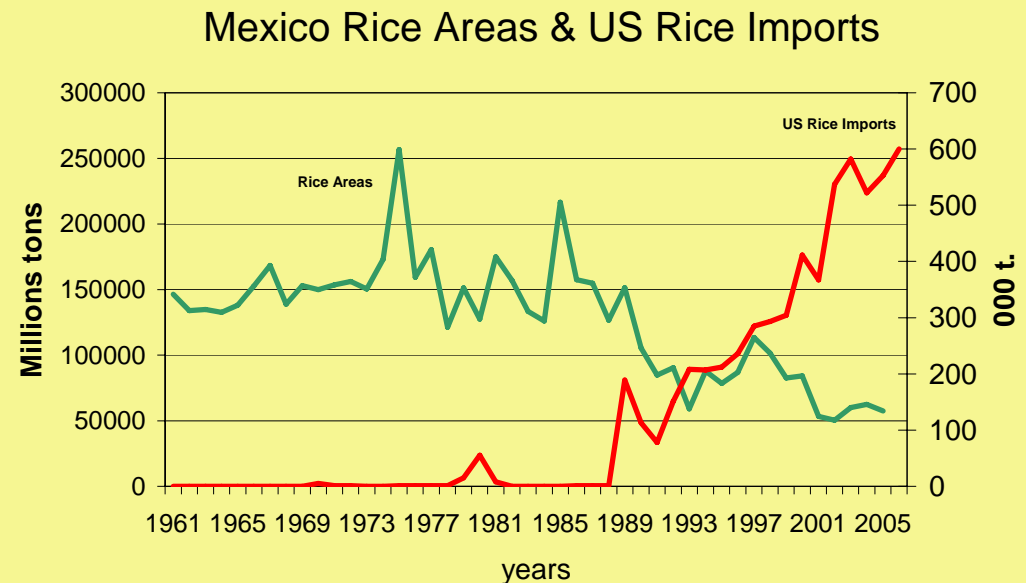
- ⌘ **Cuba** is the major importer, 0,7Mt of milled rice per year. Rice area is respectable (185.000 ha), but average yield remains low at 3,3 t/ha.
- ⌘ **Haiti** is the third largest importer (0,3Mt). This country is a major recipient of USA rice exports to the region, mainly through food assistance programs.



- ⌘ **Mexico** is also a major importer (approaching 0,6Mt of milled rice per year). During the last decade rice area decline significantly.

Mexico Rice Trends

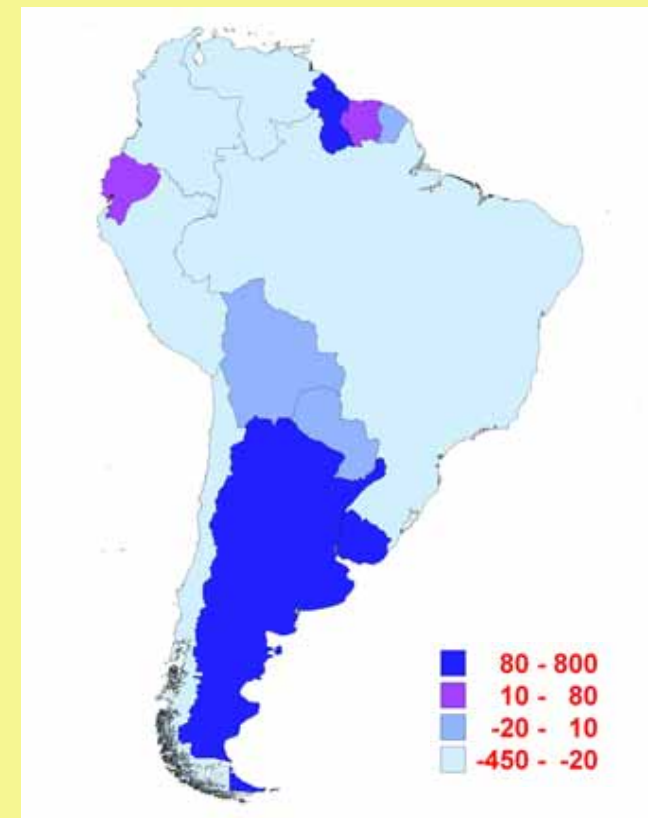
In 20 years rice area lost 70% while rice consumption rose by 80% and US rice imports rose by 60% during this time. Yields are respectable (5,0 t/ha +66% from mid-1980)



Rice Outlook in South American

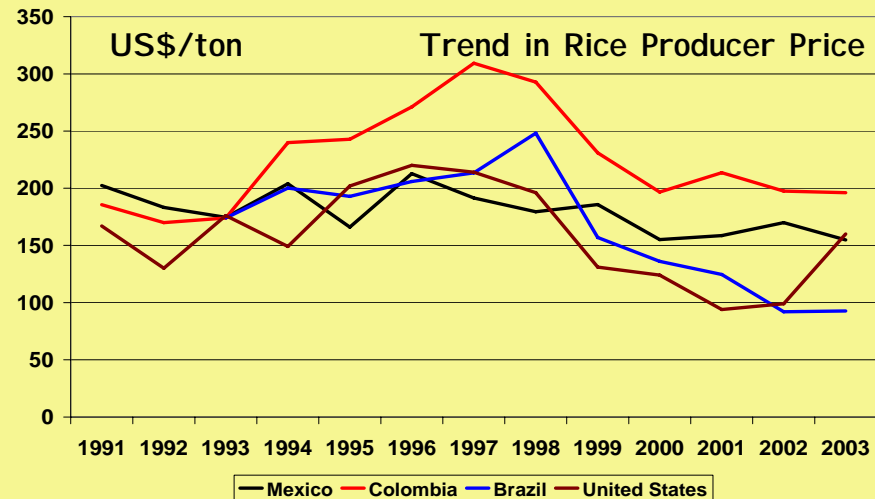
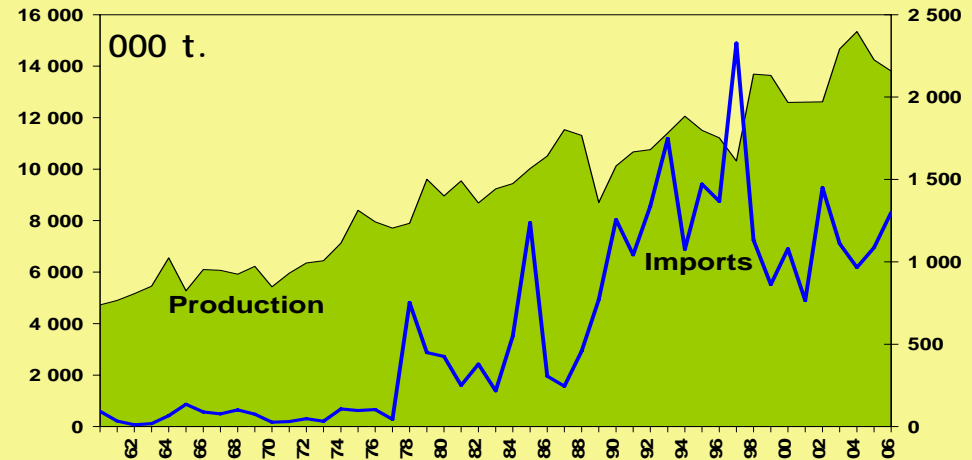
- ⌘ **South American** is a net exporter, of nearly 0,7 Mt of milled rice a year (1 Mt rice paddy), representing US\$200 millions a year.
- ⌘ **Net exporters** are Argentina, Uruguay, Guyana and Suriname
- ⌘ Paraguay and Bolivia are **self-sufficient**
- ⌘ Ecuador is also a net exporter. However, average yield remains low at 3,2 t/ha
- ⌘ In several countries **demand exceeds national production** (Brazil, Chile, Colombia, Peru, Venezuela). In this countries rice imports exceed 800.000 ton (1,15Mt paddy rice)

Rice Trade Balance (000 t.)



Rice import trends in South America

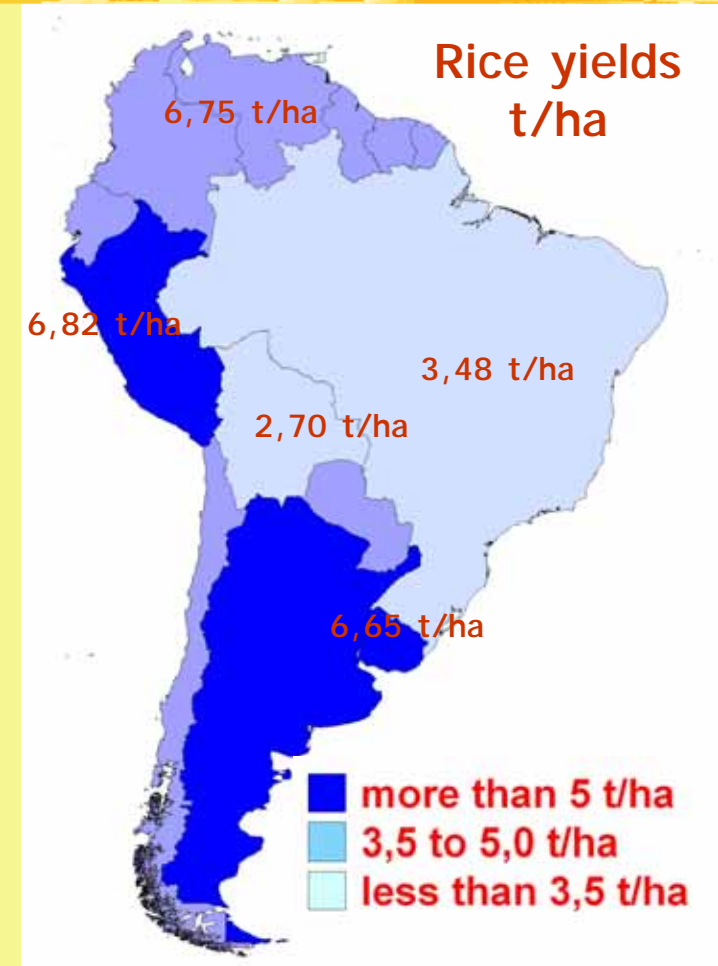
⌘ **Significant imports** started in 1990's (Peru), 2000's (Colombia & Chile) where production decline because **low prices**, high production costs and lack of credit



Source: Fao, AgroStat, 2007

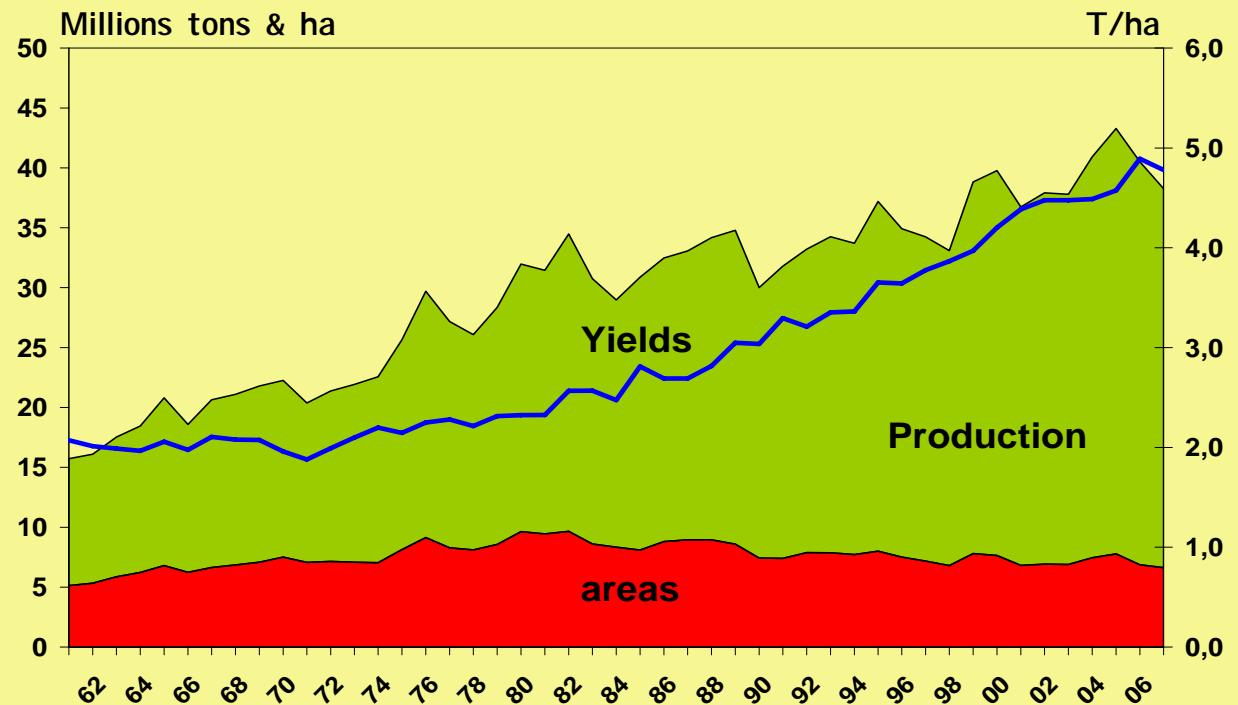
Rice Yields in South American

- ⌘ In **Peru** average yields are higher (6,82 t/ha) but rice areas declined until 2000's. Recent years, domestic production has been in progress, due to areas expansion and yields improvement ; but Peru remains a net importer
- ⌘ **Colombia and Venezuela** are largest producers in the area and yields are also respectable (4,75 t/ha)



Sustainability Rice Production in the America

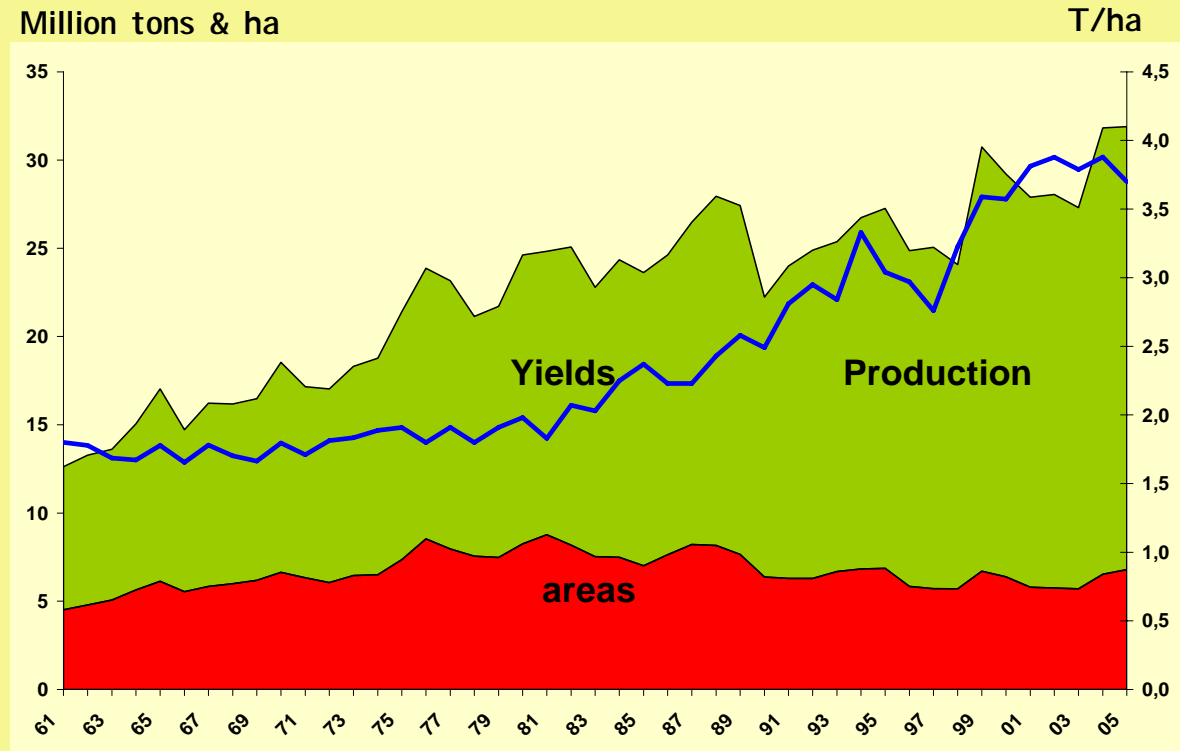
- ⌘ Rice is grown in all Americas Countries.
- ⌘ Rice Areas decreased
- ⌘ Yields trends rose since 1980's Green Revolution, irrigated areas



Rice Production areas & yields

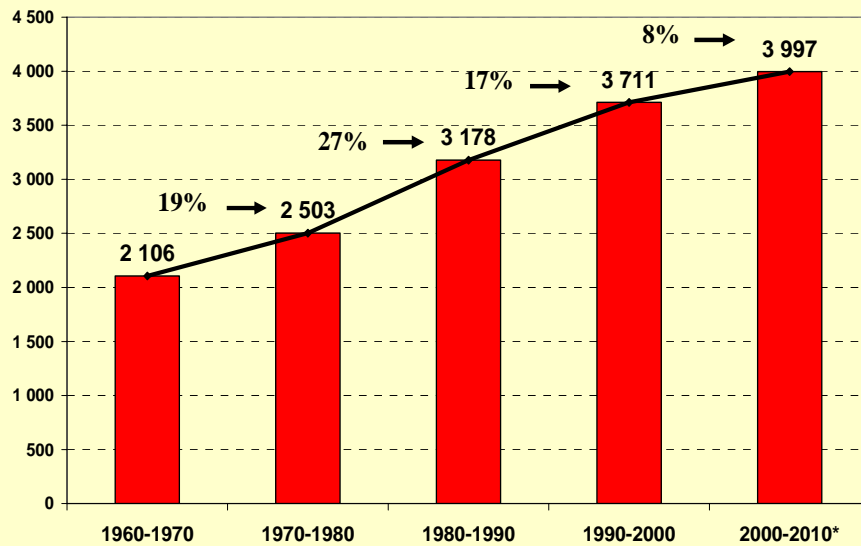
Trends in Latin America

- ⌘ In all **Latin American countries**, production increased at an annual rate of 3% while the area devoted to rice decreased at an annual rate of 1%. So, yields grew during the same period at an average of 4%
- ⌘ But, in recent years Yields are stagnating

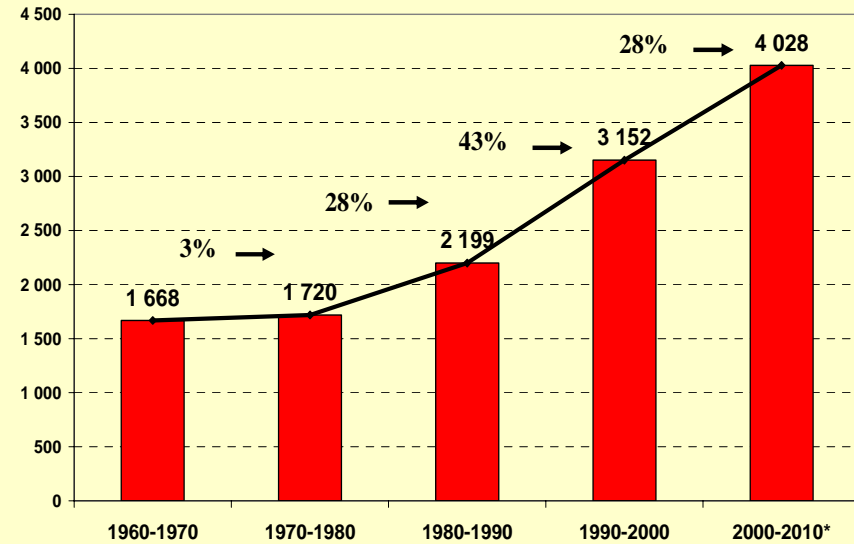


Rice Yield Trends

Rice Yield Trends in Worldwide



Rice Yield Trends in Latin America



Rice Systems by ecologies in Latin America

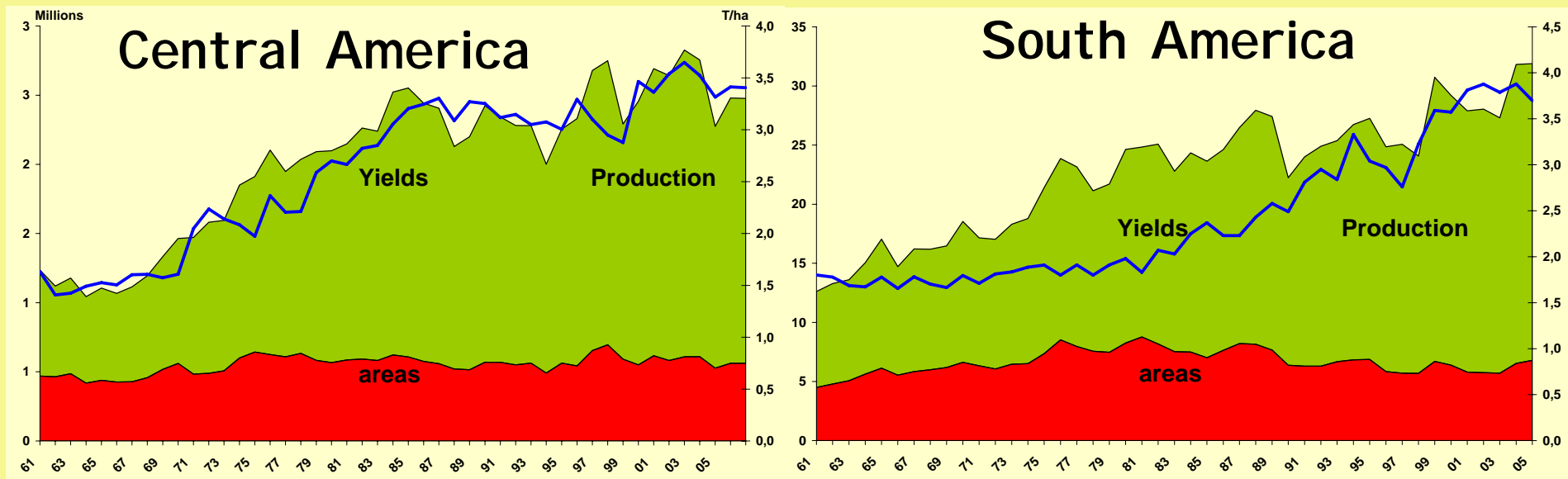
- ⌘ Irrigated System represent 33% of total rice areas
- ⌘ Upland Rice 58%

Main Countries	Irrigated	Rainfed lowland	Upland	Deepwater
Latin America	33	7	58	2
Brazil	35	5	60	0
Colombia	67	10	23	0
Cuba	100	0	0	0
Dominican Rep	93	7	0	0
Ecuador	54	7	0	38
Guyana	71	29	0	0
Peru	80	20	0	0
Surinam	93	7	0	0
Uruguay	100	0	0	0

Source : IRRI WRS, 2001

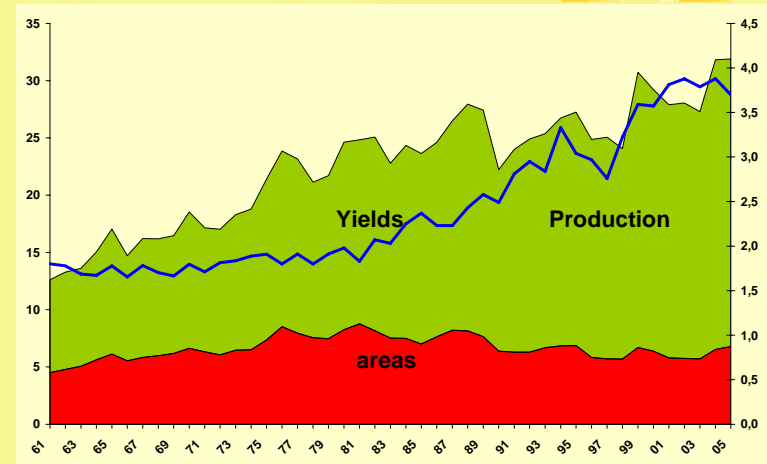
Rice Trends in South & Central America

- ⌘ Central America yields (1970-80's)
- ⌘ South America Yields (1980-90's)



Constraints and opportunity for rice production expansion

- ⌘ Yield increased thanks to combination of continues improvement in yields in the must favored irrigated ecology and in some upland areas, particularly in central Brazil (1980's and 1990's).
- ⌘ Recent years
 - ☑ **Slow growth in yield**
 - ☑ **Low producer prices**
 - ☑ **Higher costs** of rice compared to Asian countries ;
 - ☑ in most of the irrigated areas in **South America costs** vary between US\$800 and US\$950/ha (105 to 140\$/ton) ; in Colombia production costs exceed 1200\$/ha (235\$/ton)



2003-04	Rice production cost US\$/ton
Vietnam	75 to 80
Thailand	80 to 85
China	90 to 95
India	95 to 100
Uruguay	105 to 110
Brazil	110 to 120
Ecuador	125 to 130
Nigeria	140 to 145
United States	140 to 150
Venezuela	170 to 175
Colombia	230 to 235

Sources: USDA, FAO, ACA, CIRAD, Induarroz, Sica

The Longer term and its implications

Will South American became the main rice supplier for the Americas ?

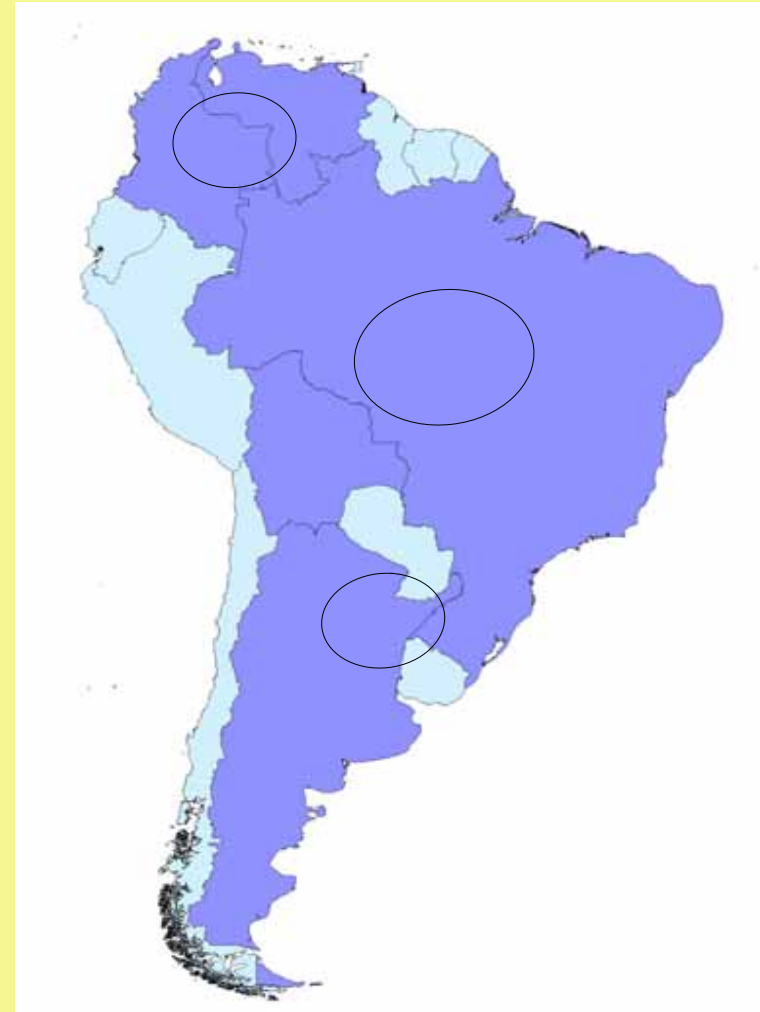
⌘ Rice areas in irrigated system potential

⌘ Mercosur (more 1 Millions ha?)

⌘ Rice areas in Upland system potential

⌘ Colombian and Venezuelan Llanos (more 1 Mha)

⌘ And...Cerrados in Brazil (3 Mha? 10 Mha? 40 Mha?)



Prospect Production and market Trends

⌘ Trade agreement impacts ?

- ☒ Bilateral free trade agreements between the US and the Latin American countries

⌘ Market segmentation

- ☒ International Exporters : Thailand (Africa, Asia) ; Vietnam (Asia), United States (Central America and Caribbean countries), Pakistan and India (Middle East)
- ☒ Regional International Exporters : Egypt (East Europe) ; Australia (Japan) ; Argentina et Uruguay (Brazil) ; Italy and Spain (European Union)

⌘ Influence from commodities worldwide demand ?

- ☒ Agro-energy Crops vs Food Crops



Muchas Gracias!

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