

THE ARGENTINEAN BIOECONOMY



GRUPO DE PAÍSES PRODUCTORES DEL SUR

GROUP OF PRODUCING COUNTRIES FROM THE SOUTHERN CONE

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An alternative for the sustainable economic and social development

GPS

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The availability of arable land, renewable fresh water and fossil fuels is increasingly limited.

“Business as usual” scenario is no longer a feasible option.

Climate change projections suggest that global balances of greenhouse gases are not immune to present forms of economic organization, and it is necessary to find ways to promote a “cleaner economic development”



Advances in biology, chemistry, I&C technologies, and engineering are making possible new paths for the production of goods based in more sustainable forms of natural resources use, that were impossible to anticipate just a few years ago.

Bioeconomy



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Bioeconomy: understood as the set of economic sectors utilizing biological resources and processes for the production of goods and services.

The bioeconomy **is a new vision** of a future society much less dependent on fossil fuels to meet its demands of energy, raw materials and other industrial inputs.

For **Argentina**, the bioeconomy represents a particularly important alternative.

- It is an approach that is based on some of the country's areas of strength:
 - biomass availability,
 - well-developed capacities in the scientific and technological disciplines
 - long standing entrepreneurial and institutional structures linked to the agricultural sector.



Argentinean Bioeconomy

Argentina: a large biomass producer

- ✓ current and potential, both in quantity and diversity



Biomass sources for alternative destinations	Units	Physical Volume
1. Woodfuel	Million tons dry base	146
2. Agrifood and / or biofuels		
Agricultural crops		
• Sugar-starch		
Sugar cane	Million tons cane humid base	19,81
Corn	Million tons of grain	23,01
Sorghum	Million tons of grain	4,46
• Oilseeds		
Soybean	Million tons of grain	48,89
Sunflower	Million tons of grain	3,67
Peanut	Million tons of grain	0,70
Others (Linseed, Canola)	Million tons of grain	0,06
Agricultural crops' byproducts–available stubble	Million tons dry matter	24,44
Livestock byproducts – available manure		
• Beef cattle		
	Million tons	10,49
• Dairy cattle		
	Million tons	5,86
• Swine		
	Million tons	2,24
• Poultry		
	Million tons	0,13
3. Solid urban waste (SUW)	Million tons of SUW	4,10

Source: Trigo, E., Regúnaga, M. et al (2012). MINCYT.

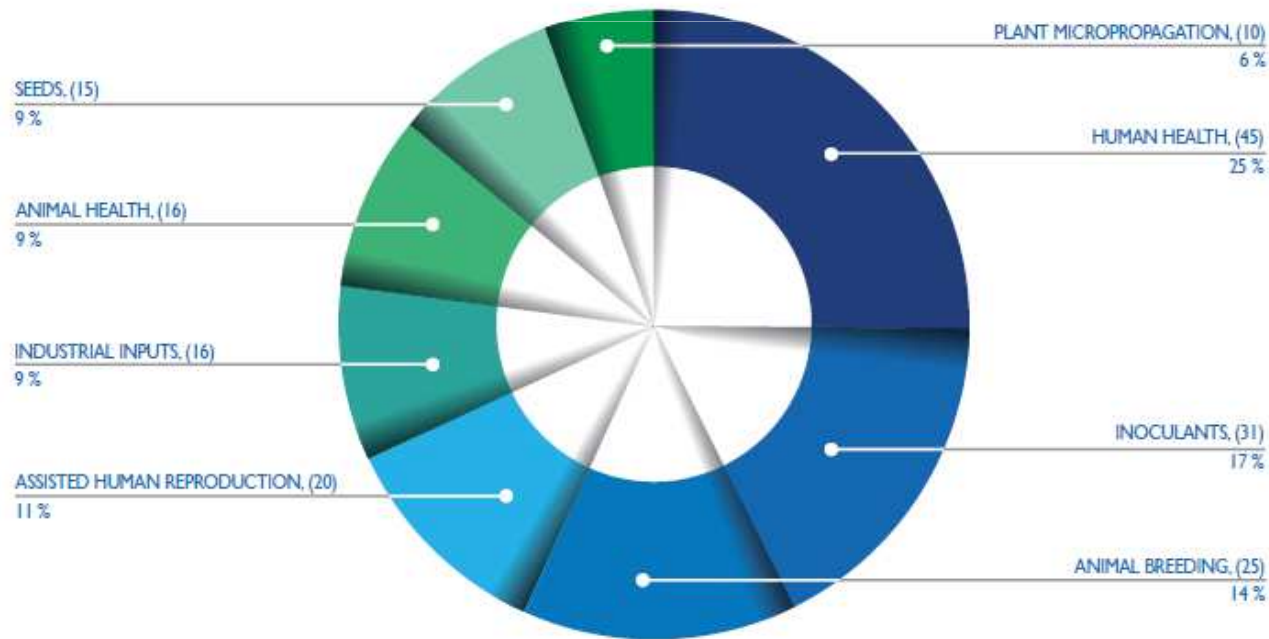
Note: * It should be noted that it is the annual production. The total production is 294 million tons; the total volume row has not been included in the table because it includes non homogeneous products.

Some Bioeconomy Experiences Already Underway in Argentina



- ✓ The existence of biotechnology enterprises in a number of important sectors of the economy.

Number and percentage of biotech firms specialized in different subsectors in 2012



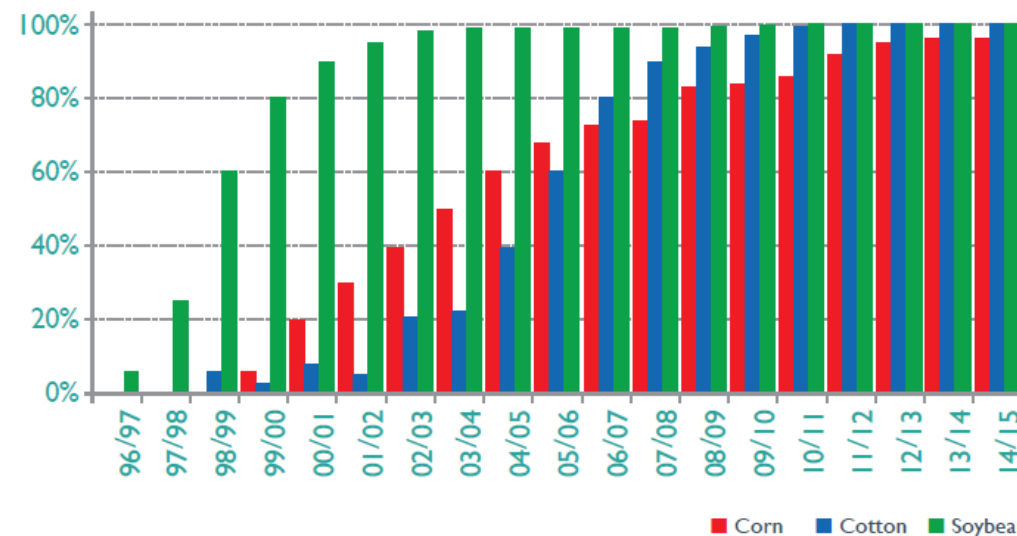
Source: Bisang, R. Las empresas de biotecnología en Argentina. MINCYT, 2014.

Some Bioeconomy Experiences Already Underway in Argentina



- ✓ The existence of biotechnology enterprises in a number of important sectors of the economy.
- ✓ Pioneering introduction and massive utilization of GMOs in agricultural commodities' production.

. Intensity of use of GMOs in soybean, corn and cotton in Argentina
(% of total planted área)



Source: www.argenbio.org

Some Bioeconomy Experiences Already Underway in Argentina

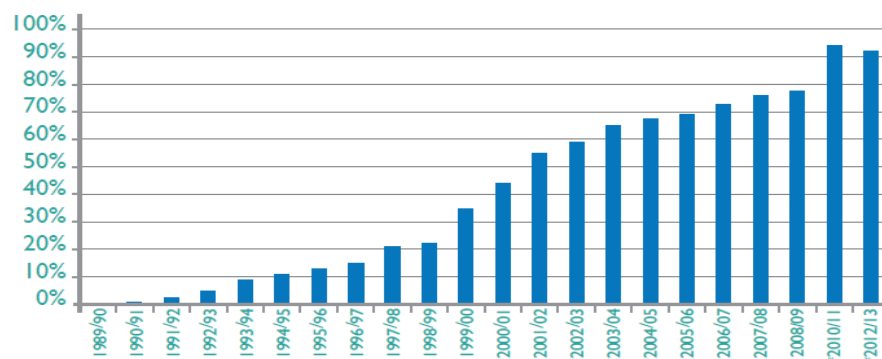


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- ✓ Utilization of environmentally friendly agronomic management strategies in major commodities' production systems.

Share of area planted with direct sowing in Argentine grain production
(percentages of total area planted with annual crops)



Source: AAPRESID, 2012, and Bolsa de Cereales for the last two years.

Note: *The increase registered during the last two crop years is partially associated with the fact that the methodology implemented by Bolsa de Cereales weights the area planted with direct sowing for each crop.



<http://www.redbpa.org.ar/index-eng.php>

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- ✓ Utilization of environmentally friendly agronomic management strategies in major commodities' production systems.
- ✓ A dynamic and highly competitive vegetable oil sector, with strong biofuels and biorefineries components.

Ranking	Production	Export
Soybean		
Meal Soybean		
Oil Soybean		

Private and Public Agenda



**Grupo
Bioeconomía**

<http://www.grupobioeconomia.com.ar/>



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Presidencia de la Nación



Ministerio de Producción
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Thank you for your attention



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