

Working Group 08 Nutrient Decision Support for Soybean Systems

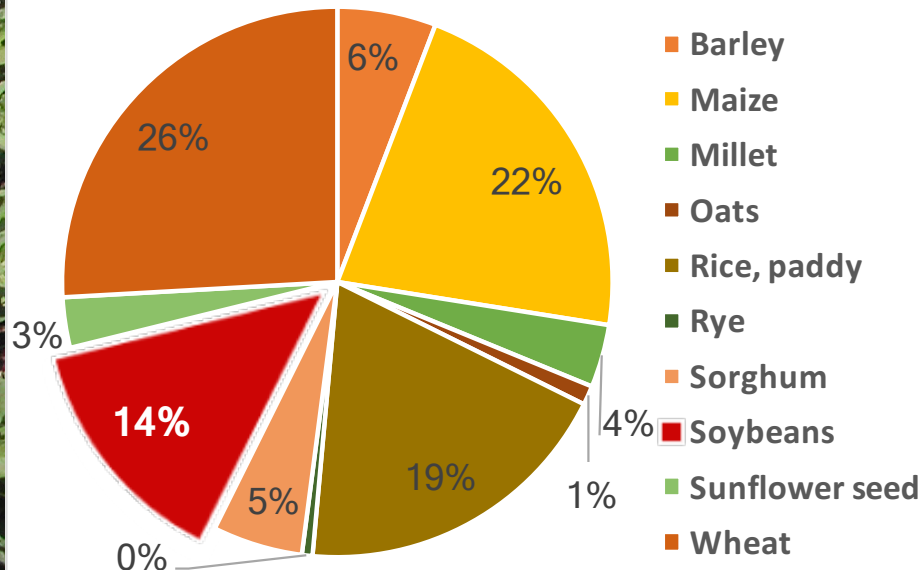
Webinar Series



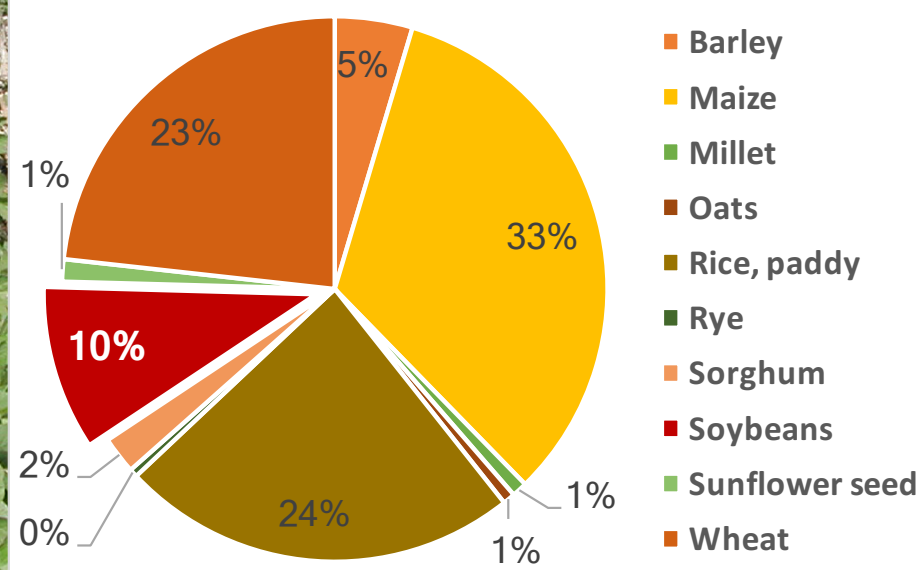
Soybean is

- Source of oil and protein for human, livestock, and aquaculture, also source of biofuel
- As vegetable oil, soybean is second to oil palm
- Fourth largest grain crop in area and production, after maize, wheat and rice

Area harvested, 2014



Production, 2014

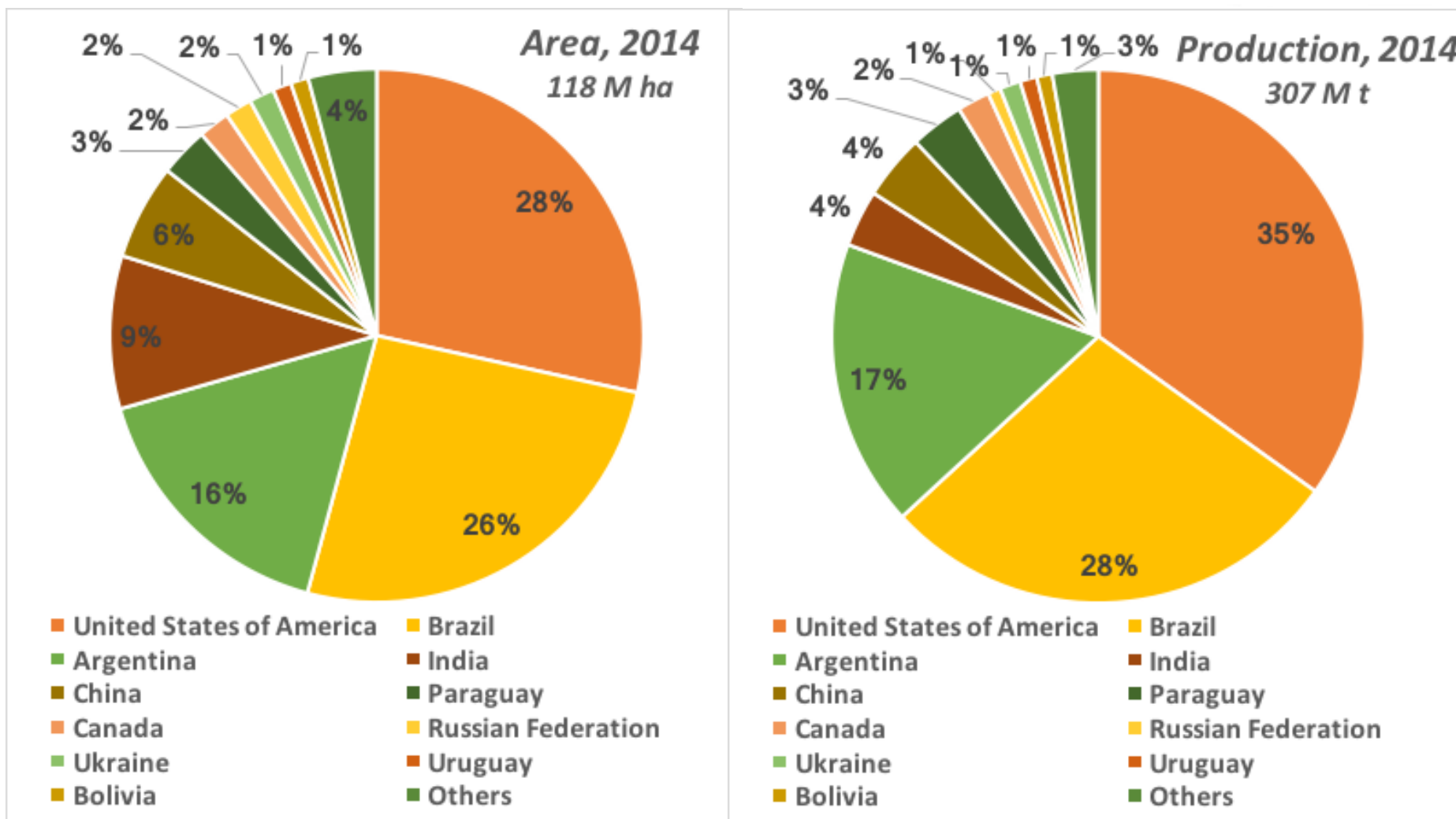


Soybean, 2014 → Area 118 M ha Production 307 M t

- Area increased 1.6 M ha per year since 1960
- Production increased 4.7 M t per year since 1960

Source: FAOSTAT, 2017

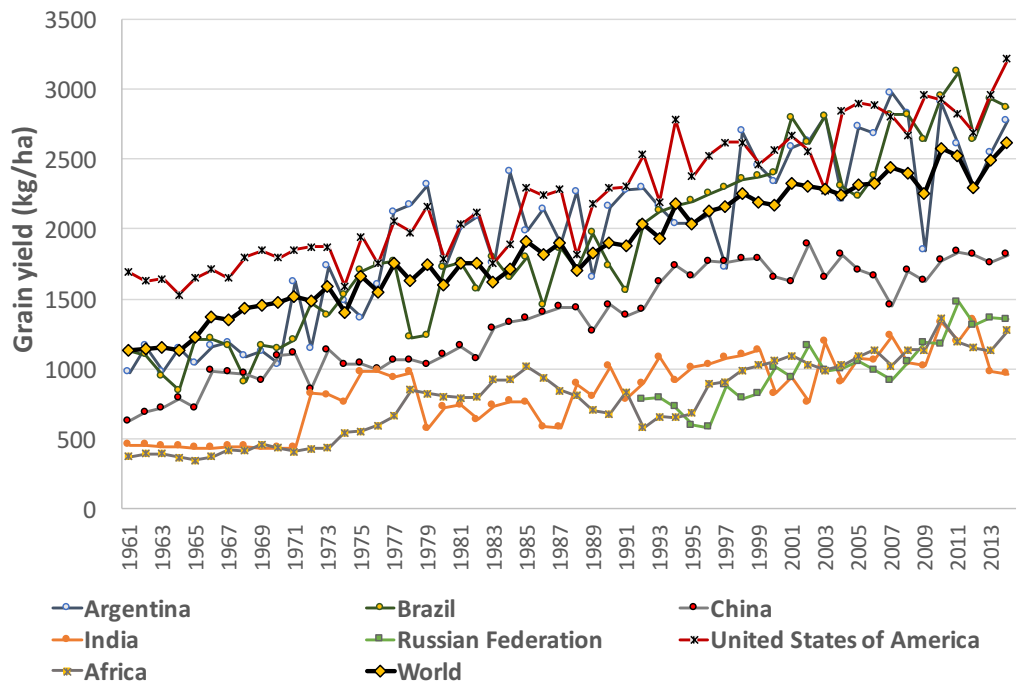
World Area and Production of Soybean



US, Brazil, Argentina, China, India, Paraguay, and Canada are the largest producers

Source: FAOSTAT, 2017

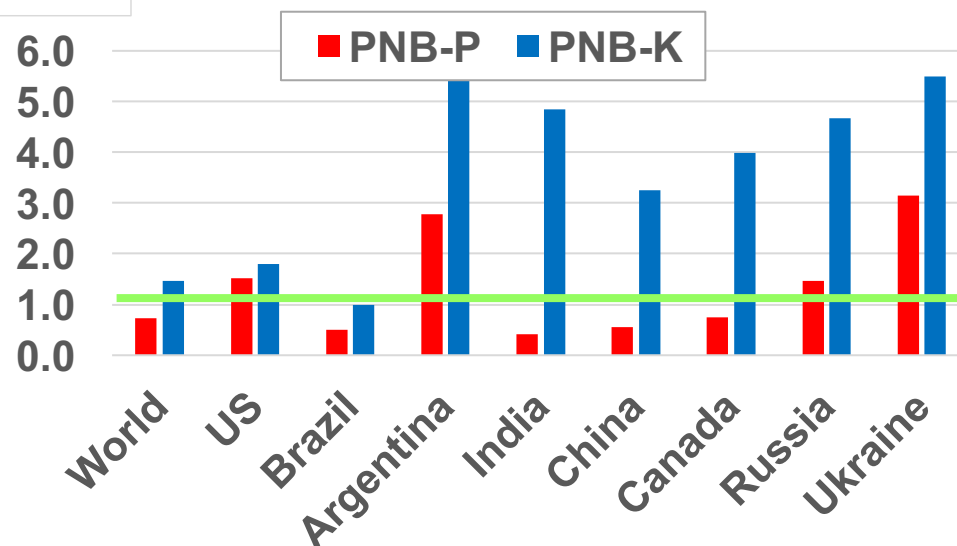
Background



- Stagnant yield increases in the last 14 years:

- Annual grain yield increases went from 26 kg/ha/year in 1961-2000 to 19 kg/ha/year in 2001-2014, a decrease of 27% in the rate of yield gain

- Soybean consumed 5.4% of world fertilizers: 9.74 M t $N+P_2O_5+K_2O$ in 2015 (4th in P and 3rd in K)
- Partial Nutrient Balances (Removal/Application) by country might indicate unbalanced fertilization



Source: FAOSTAT and IFA, 2017

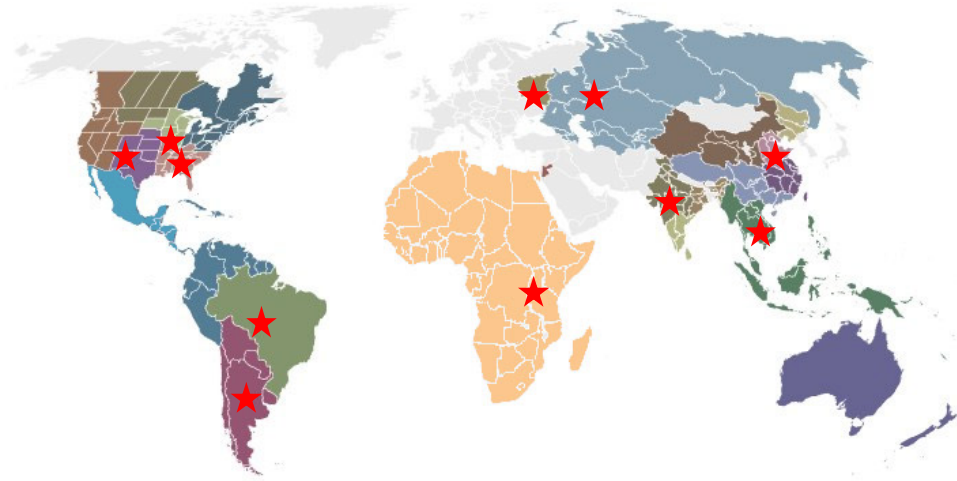
Objective

Increase soybean systems productivity
providing improved sustainability
(economic, social, and environmental)
through nutrient stewardship and
responsible crop management

Participants



- Vladimir Nosov (EECA)
- Svetlana Ivanova (EECA)
- Shamie Zingore (Africa)
- Ping He (China)
- Mike Stewart (US)
- Kaushik Majumdar (South Asia)
- Eros Francisco (Brazil)
- Fernando Garcia (LASC)



These Webinar series will present outcomes of WG Soybean Systems across the world in partnering with local and international research and farmer's organizations to whom we are grateful.

Webinar Series

Improving nutrient
management for high yielding
soybeans in Russia

Svetlana Ivanova
and Vladimir Nosov



Next Webinars (please see at <http://www.ipni.net/webinar>)

Webinar	Date	Title	Presenter
2	February 14 6:00PM Kenya time	Integrated nutrient management practices for soybeans intensification in Sub-Saharan Africa	Shamie Zingore
		Nutrient management of soybean in the Brazilian Cerrados	Eros Francisco
3	February 28	Nutrient Expert: A fertilizer decision support tool for soybean	Ping He and Kaushik Majumdar
4	March 14	Breaking yield barriers in soybean through crop and nutrient management	Ignacio Ciampitti
		Nitrogen nutrition: Would BNF be sufficient for high-yielding soybeans?	Fernando Salvagiotti