

WEBCAST:  
Agriculture  
Investing:  
Market  
Fundamentals  
& Opportunities



SUMMERHAVEN  
INVESTMENT MANAGEMENT

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**Date:** Thursday, June 28<sup>th</sup>

**Time:** 4:15pm EST

**Audio Dial-in #:** (866)395-6628

**Passcode:** 93712946

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- **This material must be preceded or accompanied by a prospectus. Please click here to review the prospectus:**  
<http://www.unitedstatesagricultureindexfund.com/documents/pdfs/usag-prospectus-20120529.pdf>
- ***This investment is not suitable for all investors. Commodity trading is highly speculative and USAG is likely to be volatile and could suffer from periods of prolonged decline in value.***
- The United States Agriculture Index Fund is distributed by ALPS Distributors, Inc., administered by Brown Brothers Harriman & Co. and United States Commodity Funds LLC is the Sponsor.
- SummerHaven Investment Management, LLC is the trading advisor. ALPS Distributors, Inc. is not affiliated with SummerHaven
- *For additional information contact: ALPS Distributors, Inc. 1290 Broadway, Suite 1100, Denver, Colorado 80203, call 1.800.920.0259 or visit <http://www.unitedstatesagricultureindexfund.com/>.*
- [USO000616 12/31/2012]

## What are “agricultural commodities”?

### On July 7, 2011, the CFTC defined an “agricultural commodity” as

- Specific familiar commodities such as corn, wheat, soybeans and cotton
- All other commodities that are, or once were, or are derived from, living organisms, including plant, animal and aquatic life
- Commodity indexes based wholly or principally on underlying agricultural commodities

## Agricultural commodities and sectors: USAG commodity components

### Grains and Oilseeds

1. Corn
2. Wheat (CME)
3. Wheat (KCB)
4. Soybeans
5. Soybean Oil
6. Soybean Meal
7. Canola Oil

### Livestock

8. Lean Hogs
9. Feeder Cattle
10. Live Cattle

### Softs

11. Cotton
12. Sugar
13. Coffee
14. Cocoa

# Agricultural commodities: Supply considerations – Land

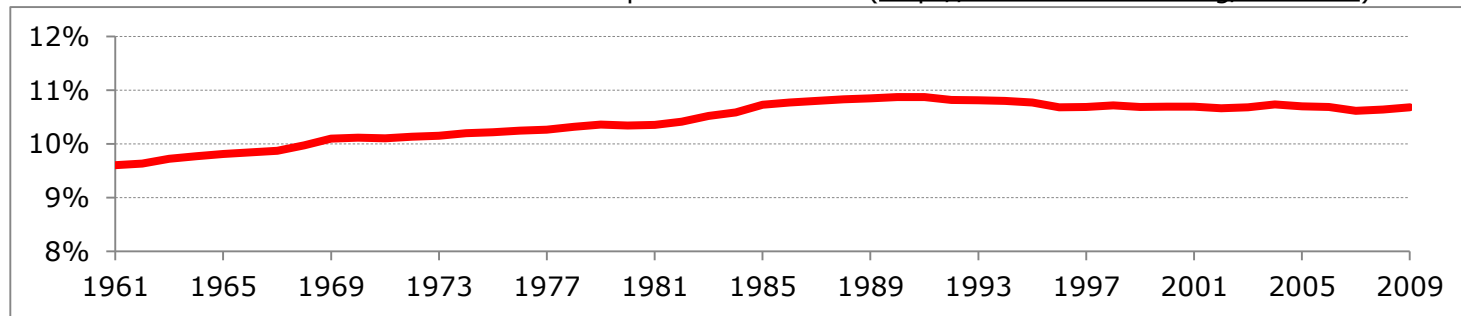


Land area is a constant, fixed resource (we can't make more)

11% of the world's land surface is used for crop production – called "arable land" – has remained relatively constant for 50 years

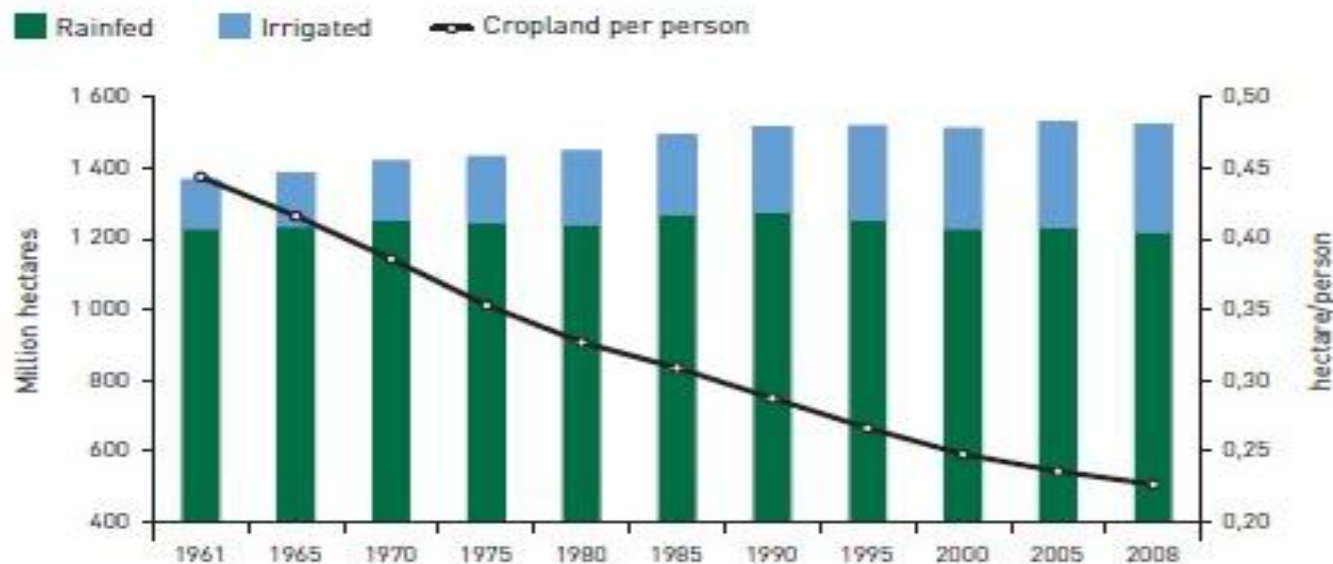
Arable land as % of world (1961 to 2009)

Source: The World Bank – World Development Indicators (<http://data.worldbank.org/indicator>)



Land evolution under irrigated and rainfed cropping (1961 to 2008)

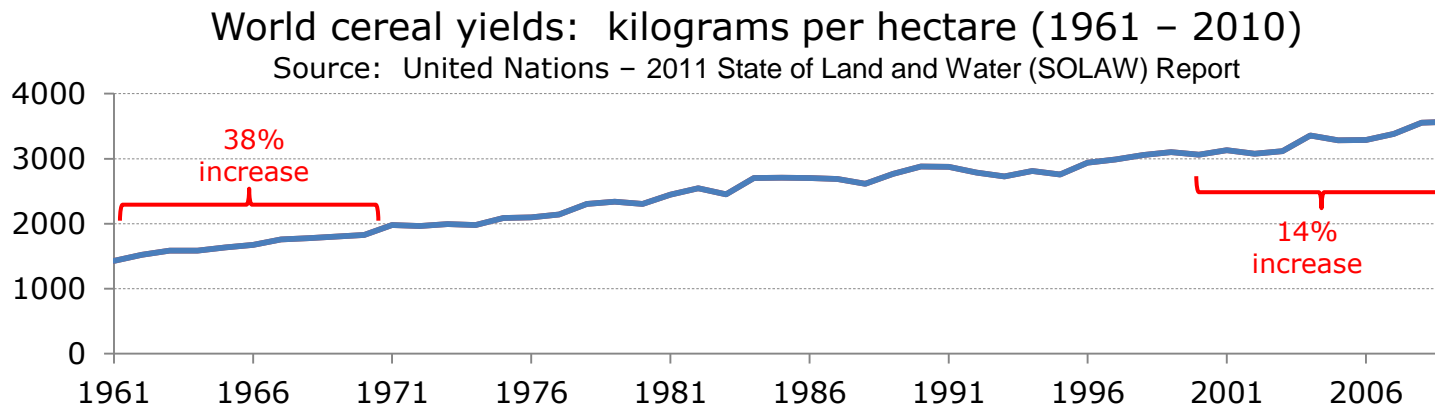
Source: United Nations – 2011 State of Land and Water (SOLAW) Report



# Agricultural commodities: Supply considerations – Land

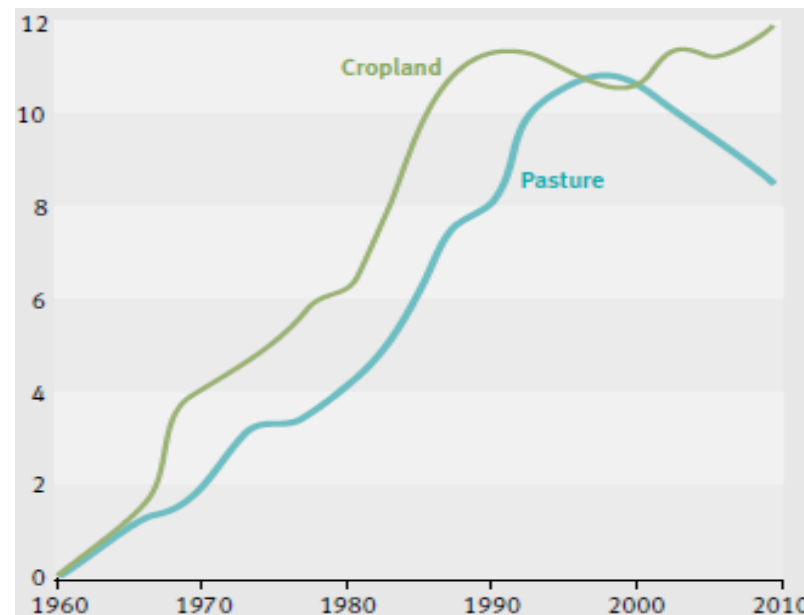


Global crop yields have increased dramatically over the last 50 years, however the rate of increase is slowing.



Global change (%) in cropland and pasture (1961 – 2010)  
Source: United Nations – Food and Agriculture Organization (FAO) 2012 Report

In 2009, there were roughly 3.3 billion hectares of global pasture and 1.5 billion hectares of global cropland. Both had significant increases to the 1990's, and cropland has increase slightly while land dedicated to pasture has decreased over the last decade.



# Agricultural commodities: Supply considerations – Water

Water scarcity affects one in three people on every continent of the globe.

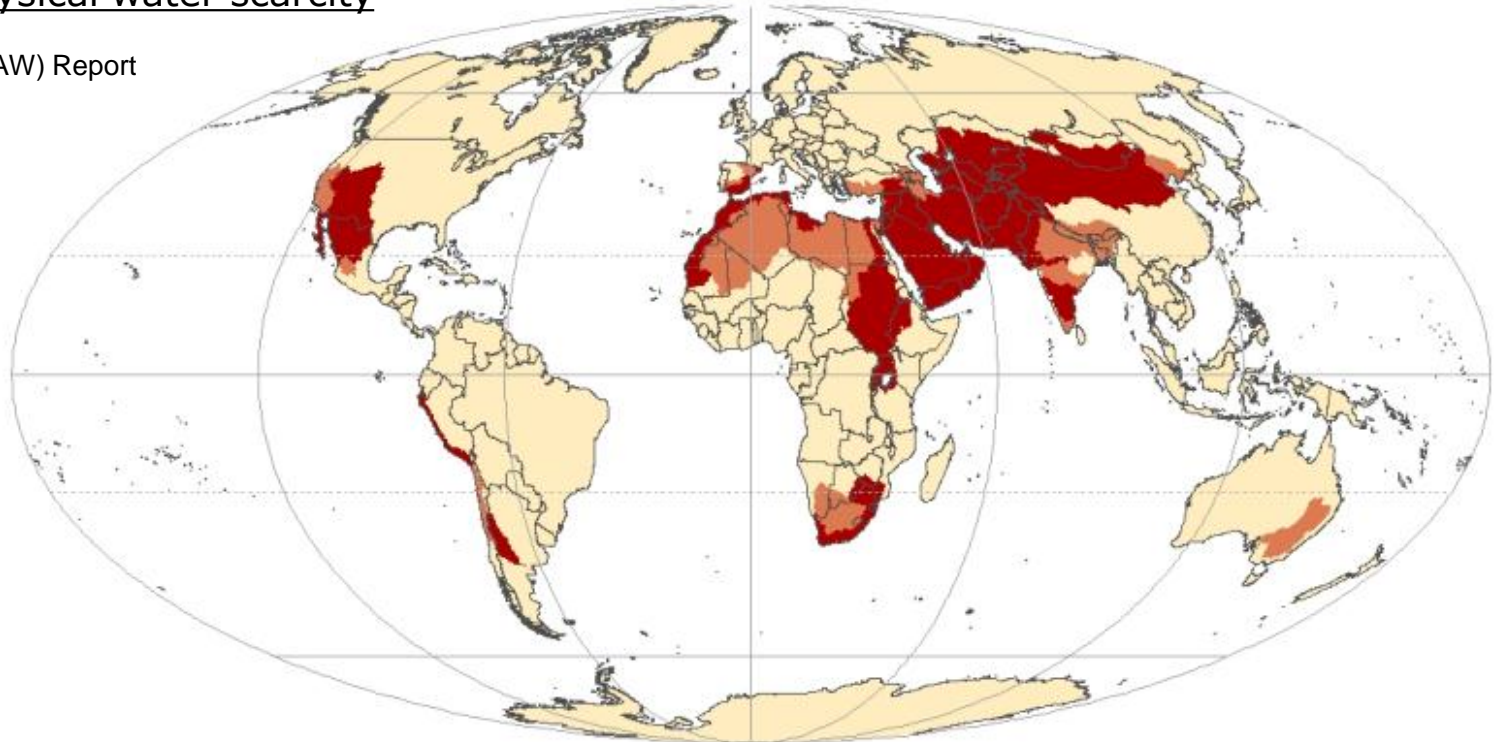
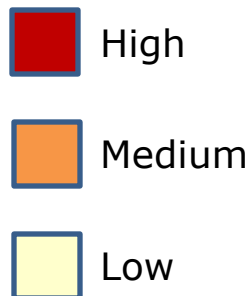
Global agriculture uses 70% of all water withdrawn from aquifers, streams and lakes, and can reach 90% for fast-growing economies.

Farmers will need 19% more water by 2050 to meet increasing food demands.

“Upscale” food demands are fueling greater water needs – 1 lb. of rice requires 1,600 gallons of water, whereas 1 lb. of beef requires 6,800 gallons of water.

## Global distribution of physical water scarcity

Source: United Nations –  
2011 State of Land and Water (SOLAW) Report



## Climate change – “global warming” – can affect agricultural production in a number of negative ways

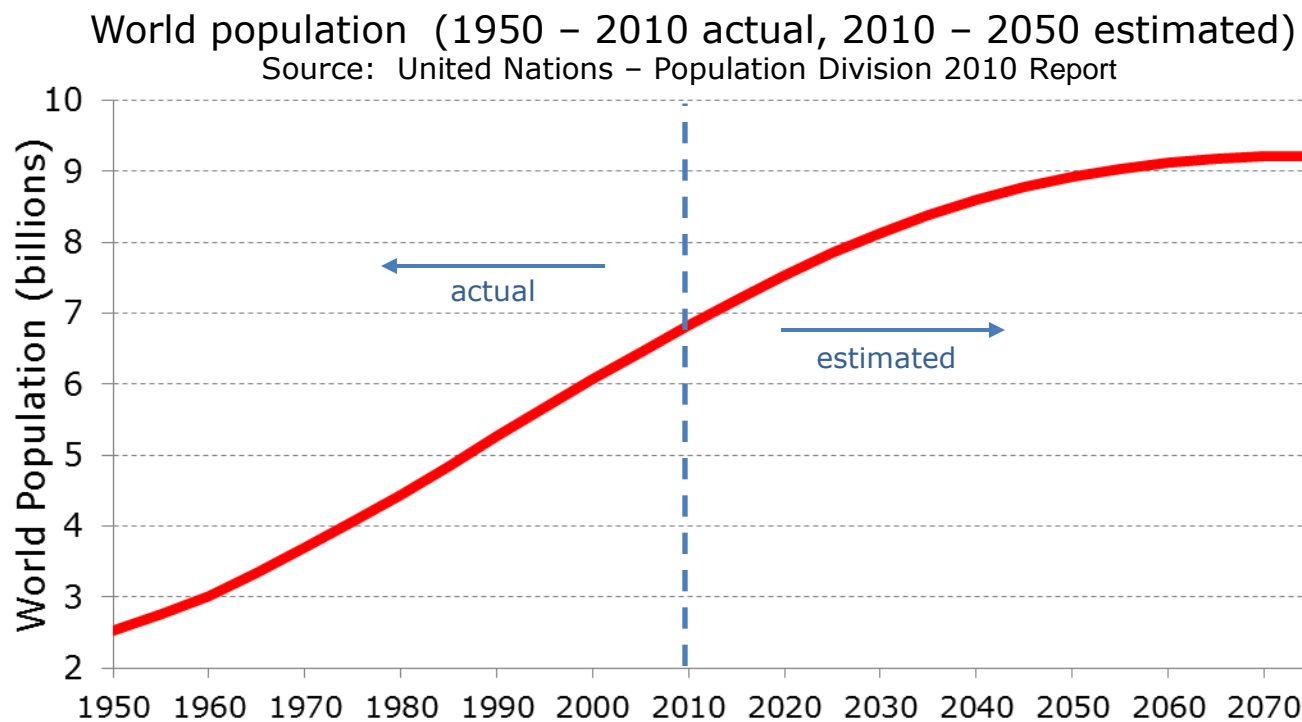
- Average surface temperatures are rising and could rise by more than 7°F by 2080. Global effects may be asymmetric:
  - Already water-scarce areas of the world could become even hotter and drier, putting strain on agriculture supported by irrigation.
  - The growing season in northern temperate areas may increase, but almost everywhere else will experience a shortened growing season. Crop yields in the tropics and sub-tropics (current population of 3 billion) may decline 20% to 40%.
  - 40% of the world’s irrigation is supported by snowmelt from large mountain systems (e.g. Himalayas, Rocky Mountains). Glacier loss worldwide is accelerating as temperatures increase.
- Carbon dioxide concentrations could double during this period. Although small initial increases in CO<sub>2</sub> and temperatures increase crop yields, this large increase eventually impairs the efficiency of photosynthesis and would reduce crop yields.
- Storm systems may become more intense and active, especially cyclone/hurricane activity in the tropics due to increasing ocean temperatures.

# Agricultural commodities: Demand considerations – Population



World population is now 7 billion and is expected to grow to more than 9 billion by 2050. Developing economies are eating more “upstream” (i.e. meat) which is much less efficient than direct consumption of cereals and grains. From 1978 to today, China’s total meat consumption has increased from 33% to 200% of the U.S. meat consumption. Per-capita meat consumption in the developing world doubled from 1980 to 2002.

Increases in farming efficiency and crop yields have accommodated the increased demand for food as population has risen, however crop yield growth has slowed recently (see p.5).



Source: United Nations: Food and Agriculture Organization Statistical Yearbook 2012



# Agricultural commodities: Demand considerations – Biodiesel



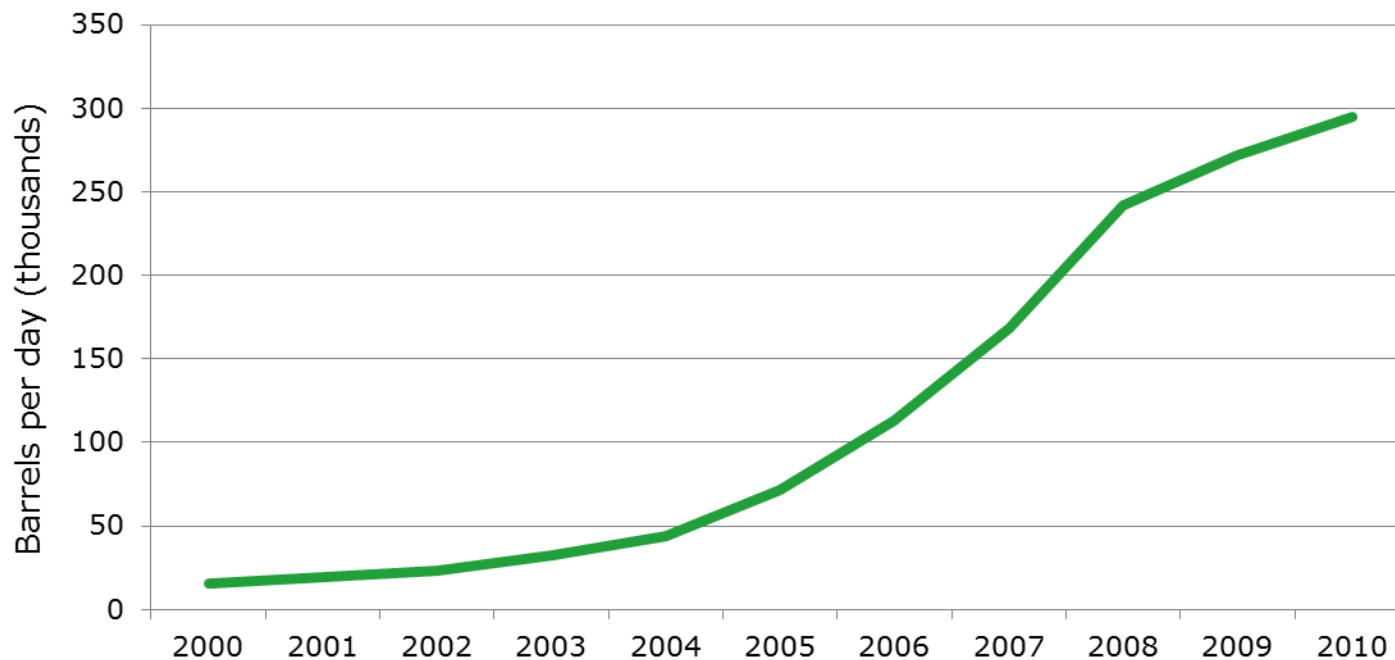
Global biofuel demand is expected to continue growing to 2020 and beyond, largely due to tax incentives and use mandates.

Corn use in ethanol production has grown rapidly since 2005 and currently utilizes 40% of annual U.S. corn production.

EU mandates for biodiesel cannot be met with domestic production alone – EU has increased oilseed production and increased imports to meet demand.

## World biodiesel production per day (2000 – 2010)

Source: U.S. Energy Information Administration – International Energy Statistics



Sources: US Energy Information Agency, USDA

The SummerHaven Dynamic Agriculture Index (SDAI) was launched in November 2010 to be an investable agriculture benchmark for commodity investors. The SDAI attempts to maximize backwardation and minimize contango while utilizing contracts in liquid portions of the futures curve. The SDAI is composed of 14 agricultural commodity futures and collateralized with 3-month U.S. Treasury Bills.

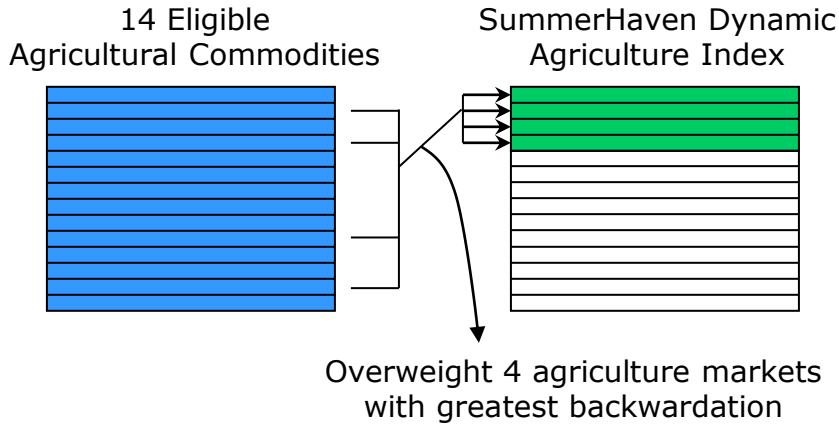
## SummerHaven Dynamic Agriculture Index – May 2012 composition

| Grains & Oilseeds: 47% |       | Livestock: 21% |       | Softs: 32% |       |
|------------------------|-------|----------------|-------|------------|-------|
| Soybeans               | 14.5% | Lean Hogs      | 4.0%  | Cotton     | 4.0%  |
| Soybean Meal           | 8.0%  | Live Cattle    | 12.0% | Sugar      | 12.0% |
| Soybean Oil            | 1.0%  | Feeder Cattle  | 5.0%  | Coffee     | 8.0%  |
| Corn                   | 14.5% |                |       | Cocoa      | 8.0%  |
| Soft Red Winter Wheat  | 6.0%  |                |       |            |       |
| Hard Red Winter Wheat  | 2.0%  |                |       |            |       |
| Canola Oil             | 1.0%  |                |       |            |       |

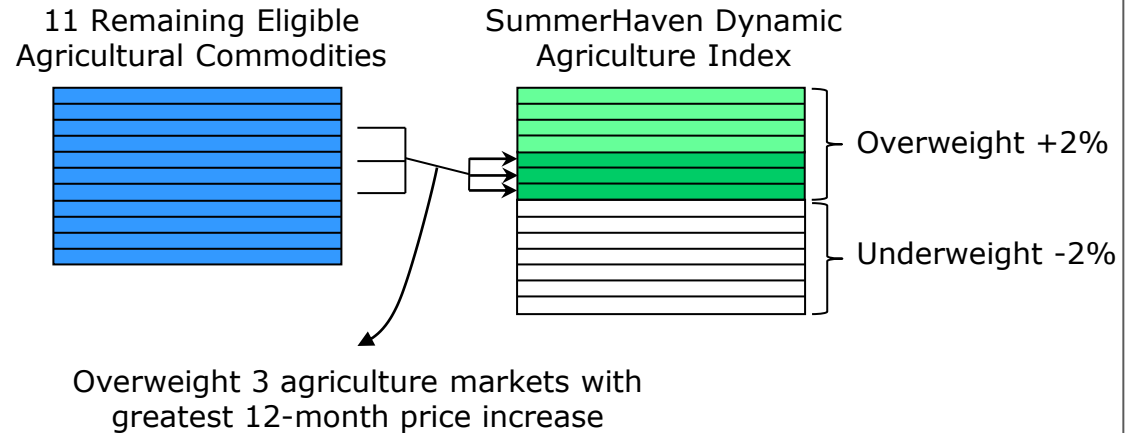
# SummerHaven Dynamic Agriculture Index<sup>SM</sup> – Methodology



## Step 1: Commodity Selection – Backwardation



## Step 2: Commodity Selection – Momentum



## Step 3: Contract Month Selection



For each of the 14 index commodities, SDAI selects the contract month with the greatest backwardation (or least contango), taking into account the allowed contracts and maximum tenor for each commodity market.

| SDAI Base Weights     |       |               |       |        |       |
|-----------------------|-------|---------------|-------|--------|-------|
| Soybeans              | 12.5% | Lean Hogs     | 6.0%  | Cotton | 6.0%  |
| Soybean Meal          | 6.0%  | Live Cattle   | 10.0% | Sugar  | 10.0% |
| Soybean Oil           | 3.0%  | Feeder Cattle | 3.0%  | Coffee | 10.0% |
| Corn                  | 12.5% |               |       | Cocoa  | 6.0%  |
| Soft Red Winter Wheat | 8.0%  |               |       |        |       |
| Hard Red Winter Wheat | 4.0%  |               |       |        |       |
| Canola Oil            | 3.0%  |               |       |        |       |

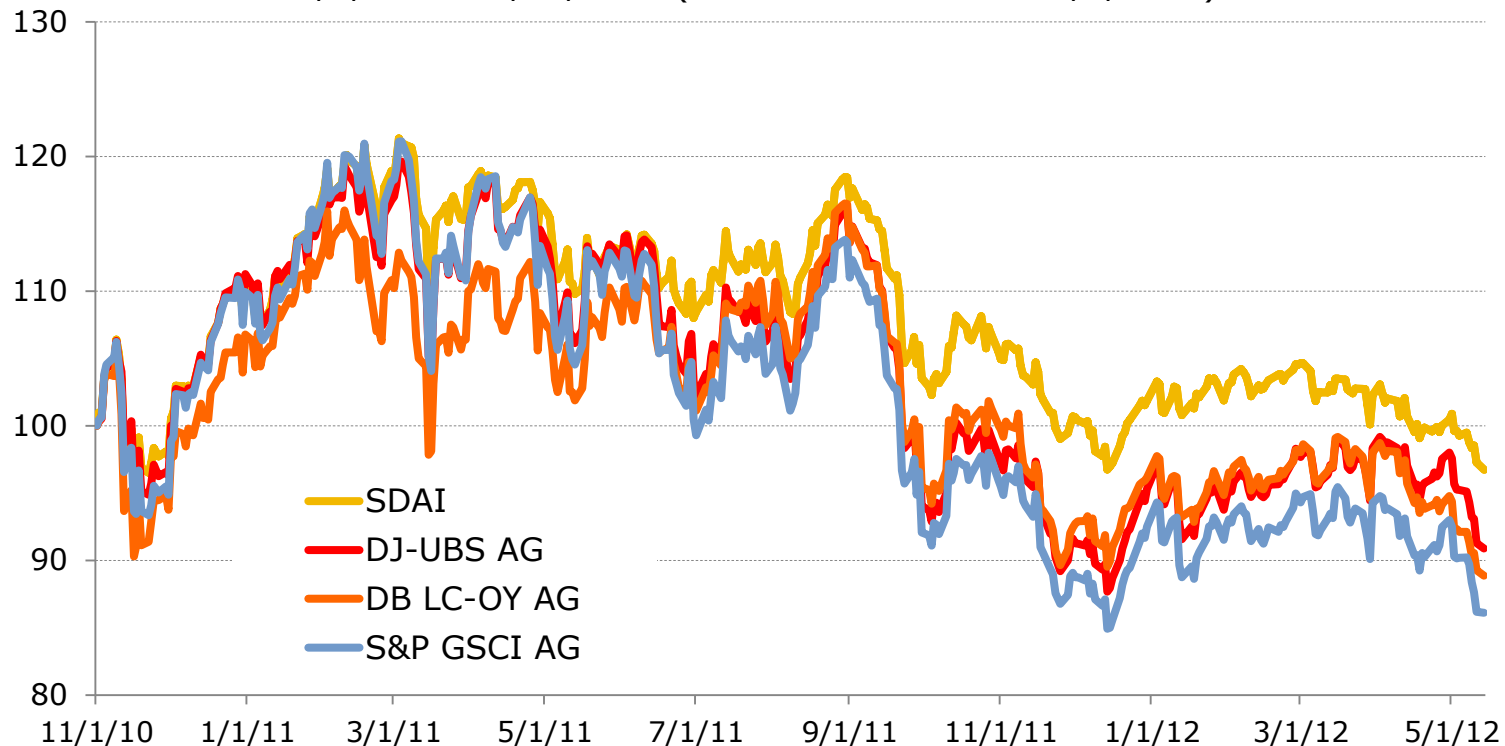
# SummerHaven Dynamic Agriculture Index<sup>SM</sup>



Performance benchmark for "USAG" ETF: [www.unitedstatesagricultureindexfund.com](http://www.unitedstatesagricultureindexfund.com)

SummerHaven Dynamic Agriculture Index is calculated and published by NYSE with live returns since November 2010

Total Return Comparison of SummerHaven Dynamic Agriculture Index (SDAI) vs. Dow Jones-UBS Agriculture (DJ-UBS AG), Deutsche Bank Liquid Commodity Index-Optimal Yield Agriculture (DB LC-OY AG) and S&P GSCI Agriculture (S&P GSCI AG) 11/1/2010 - 5/15/2012 (all indexes = 100 on 11/1/2010)



**Past results are not necessarily indicative of future results.**

Commodity trading involves substantial risk of loss. No direct investments in indexes are possible, and the performance of the indexes (including SDAI) assumes no transaction costs, management fees, or other expenses. An investment in USAG, which seeks to track the SDAI, will include transaction costs, management fees, and other expenses, and returns will be lower than that of the SDAI.

Source: Bloomberg LP

## United States Agriculture Index Fund (NYSE Arca: **USAG**)

- Listed on the NYSE on April 13, 2012
- USAG offers the convenience of an exchange-traded security
- USAG permits commodity exposure without using a commodity futures account
- USAG provides a vehicle to take directional positions on a portfolio of diversified agriculture commodity futures

### **Fund Performance** *As of 4/13/12*

The United States Agriculture Index Fund commenced operations on April 13, 2012 and therefore does not have sufficient performance data to display. Quarterly performance data will be provided after the first full quarter from the inception of the Fund.

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# Contact Information



**For more information or to receive a copy of today's slides please contact us at:**

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**Email:** [USAGinfo@alpsinc.com](mailto:USAGinfo@alpsinc.com)

**USAG Website:** <http://www.unitedstatesagricultureindexfund.com/>

**SDAI Index Website:**

<https://www.summerhavenindex.com/guest/sdai.html>

**ALPS Portfolio Solutions website:** [www.alpsfunds.com](http://www.alpsfunds.com)

## **Please see the following reports and websites for additional reference data:**

The World Bank – World Development Indications (WDI):

<http://data.worldbank.org/indicator>

Food and Agriculture Organization of the United Nations (FAO) – The State of the World’s Land and Water Resources 2011 (SOLAW) Report

[http://www.fao.org/nr/water/docs/SOLAW\\_EX\\_SUMM\\_WEB\\_EN.pdf](http://www.fao.org/nr/water/docs/SOLAW_EX_SUMM_WEB_EN.pdf)

United Nations Environment Programme – Global Environment Outlook 5 (GEO5 – 2012):

[http://www.unep.org/geo/pdfs/geo5/GEO5\\_report\\_full\\_en.pdf](http://www.unep.org/geo/pdfs/geo5/GEO5_report_full_en.pdf)

World Health Organization (WHO) – Water and Climate statistics:

<http://www.who.int/topics/water/en/index.html>

<http://www.who.int/topics/climate/en/>

Food and Agriculture Organization of the United Nations (FAO) – Statistical Yearbook 2012:

<http://www.fao.org/docrep/015/i2490e/i2490e00.htm>

U.S. Energy Information Administration – International Energy Statistics:

<http://www.eia.gov/cfapps/ipdbproject/IEDIndex3.cfm>

U.S. Department of Agriculture (USDA) – Agriculture Projections to 2021 (Feb 2012 report):

<http://www.ers.usda.gov/Publications/OCE121/OCE121a.pdf>

United Nations Population Division – World Population Prospects: The 2010 Revision

[http://esa.un.org/unpd/wpp/unpp/panel\\_population.htm](http://esa.un.org/unpd/wpp/unpp/panel_population.htm)