# Organic Pricing Methodologies for Barley, Corn, Cotton, Grain Sorghum, Rice, Soybeans, Sunflowers, and Wheat

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## Organic Commodities

The CEPP provides the authority to derive a factor "as determined by RMA" to establish organic prices, as applicable. This paper is to inform stakeholders regarding the methodology used to derive these factors.

## Organic Corn and Soybeans

Data used to derive these organic factors is gathered from the Agricultural Marketing Service (AMS) and the Chicago Board of Trade (CBOT). All plans of insurance (Yield Protection, Area Yield Protection, Supplemental Coverage Option [SCO] Yield Protection, Revenue Protection, Area Revenue Protection, SCO Revenue Protection, Revenue Protection with Harvest Price Exclusion [HPE], Area Revenue Protection – HPE, and SCO Revenue Protection with HPE) associated with the Basic Provisions use the same factors, which are applied to both the projected price and harvest price as applicable.

National organic corn and soybean prices are published bi-weekly by AMS in the "National Organic Grain and Feedstuffs" (NOGF) report. This report contains a range of organic prices including a "weighted average" price; however, the "weighted average" price is not production weighted. Therefore, as a conservative approach, RMA uses the "low" price category and converts that bi-weekly posted price into a simple average monthly price.

These monthly organic prices are compared with the CBOT average monthly futures prices for conventional corn and soybeans. To compute the corn factor, the monthly organic corn prices are divided by the corresponding monthly average price of the December corn futures contract. To compute the soybean factor, the monthly organic soybean prices are divided by the corresponding monthly average of the November soybean futures contract. A simple average of these factors over the most recent five years (60 monthly factors) provides the basis for each respective factor.

A single corn factor and a single soybean factor are applied respectively to the discovered CBOT conventional prices as described in the CEPP.

## Organic Cotton

Data used to derive the organic cotton factor is gathered from industry and the Intercontinental Exchange (ICE). The plans of insurance (Yield Protection, Area Yield Protection, SCO Yield Protection, Revenue Protection, Area Revenue Protection, SCO Revenue Protection, Revenue Protection with HPE, Area Revenue Protection - HPE, SCO Revenue Protection with HPE, Stacked Income Protection Plan – Revenue Protection, and Stacked Income Protection Plan – Revenue Protection with HPE) associated with the Basic Provisions

use the same factor, which is applied to both the projected price and harvest price as applicable.

Proprietary industry data that represents a majority of the United States organic cotton market is made available to RMA. Season average organic market prices are compared to National Agricultural Statistics Service (NASS) season average conventional market prices to derive a linear relationship between conventional and organic prices. The average futures price for October of the pre-harvest year (e.g. October 2018 for the CTZ19 contract) is used to forecast an expected organic premium for the harvest year's crop based on the linear relationship. The amount resulting from this calculation will be added to the discovered ICE cotton #2 futures prices as described in the CEPP.

Due to the proprietary nature of these data the factor cannot be calculated independently. The value will be released publicly at www.rma.usda.gov prior to the contract change date.

## Organic Grain Sorghum

Data used to derive the organic grain sorghum factor is gathered from the USDA Certified Organic Production Surveys and the CBOT. The plans of insurance (Yield Protection, Area Yield Protection, SCO Yield Protection, Revenue Protection, Area Revenue Protection, SCO Revenue Protection, Revenue Protection with HPE, Area Revenue Protection – HPE, and SCO Revenue Protection with HPE) associated with the Basic Provisions use the same factor, which is applied to both the projected price and harvest price as applicable.

To compute the organic grain sorghum factor, the national organic grain sorghum price is computed by year from data contained in the Organic Production Surveys, beginning in 2011. The average October futures price for the December corn contract is derived by year for the years corresponding with the Organic Production Surveys. From these, a ratio is derived for each year that equals the national organic grain sorghum price divided by the associated average corn futures price. For example, the 2011 ratio equals the national organic grain sorghum price obtained from the 2011 Organic Production Survey divided by the 2011 average October futures price for the December corn contract.

The average of the ratios is multiplied by the conventional grain sorghum price factor computed in accordance with the grain sorghum methodology paper. The resulting factor is the organic grain sorghum factor, and is multiplied by the CBOT corn prices specified in the grain sorghum CEPP. A single organic grain sorghum factor is used for all locations specified in the grain sorghum CEPP.

## Organic Rice

Growers are eligible to insure organic rice production under terms detailed in RMA's Contract Price Addendum (CPA), using the price in the contract to establish coverage for the crop insurance program. (Please see http://www.rma.usda.gov/policies/2014/14cpa-r.pdf.)

Starting in the 2016 crop year, the organic rice price factor will reflect the low end of the range of recent organic contract prices (not to exceed the most recent 5 years) submitted to RMA under the CPA. The organic rice price factor is set conservatively in order to minimize the impact RMA coverage might have on price negotiations between growers and buyers.

Due to the proprietary nature of these data the factor cannot be calculated independently. The value will be released publicly at www.rma.usda.gov prior to the contract change date.

## Organic Sunflowers, Oil Type

Data used to derive the organic sunflower seed factor is gathered from the USDA Organic Surveys and NASS oilseed prices received by U.S. farmers. All plans of insurance (Yield Protection, SCO Yield Protection, Revenue Protection, SCO Revenue Protection, Revenue Protection with HPE, and SCO Revenue Protection with HPE) associated with the Basic Provisions use the same factor, which is applied to both the projected price and harvest price as applicable.

The national average organic sunflower seed price is derived from production and sales data in the Organic Survey. The organic price for each year available is divided by the average conventional price for that year to get an annual organic to conventional ratio. The organic sunflower factor is an average of the annual organic to conventional ratios. This factor is multiplied by the discovered conventional prices for oil type sunflowers as described in the sunflowers CEPP.

## Organic Wheat

Data used to derive the organic wheat factor is gathered from unpublished AMS reports and the National Agricultural Statistics Service (NASS). All plans of insurance (Yield Protection, Area Yield Protection, SCO Yield Protection, Revenue Protection, Area Revenue Protection, SCO Revenue Protection, Revenue Protection with HPE, Area Revenue Protection – HPE, and SCO Revenue Protection with HPE) associated with the Basic Provisions use the same factor, which is applied to both the projected price and harvest price as applicable.

For the most recent five years, national monthly organic wheat prices from unpublished AMS reports are divided by monthly conventional NASS wheat prices. A simple average of these monthly factors is computed for each crop year, and the resulting annual factors for the past five crop years are averaged to produce the organic wheat price factor. Due to the nature of the data, a single wheat factor is applied to all the discovered conventional prices as described in the wheat CEPP. In the case of the durum type, the product of the organic wheat price factor and the durum factor will be applied directly to the average daily settlement price, as described in the CEPP. (See separate Durum Wheat Pricing Methodology paper.)

## Organic Barley

Data used to derive the organic barley factor is gathered from the Agricultural Marketing Service (AMS). All plans of insurance (Yield Protection, Area Yield Protection, SCO Yield Protection, Revenue Protection, Area Revenue Protection, SCO Revenue Protection, Revenue Protection with HPE, Area Revenue Protection – HPE, and SCO Revenue Protection with HPE) associated with the Basic Provisions use the same factor, which is applied to both the projected price and harvest price as applicable.

For the most recent five years, annual organic barley prices from AMS are divided by annual conventional barley AMS prices. A simple average of these annual factors is computed to produce the organic barley price factor.

This ratio is multiplied by the conventional barley price factor computed in accordance with the barley methodology paper. The resulting factor is the organic barley factor, and is multiplied by the CBOT corn prices specified in the barley CEPP. A single organic barley factor is used for all locations specified in the barley CEPP.