**Table 7.F** Disbursements from NREGA

| | 2006-07 | 2007-08 | 2008-09 | 2009-10 | 2010-11 |
|---|---|---|---|---|---|
| Employment provided to households (in crores) | 2.10 | 3.39 | 4.51 | 5.26 | 5.49 |
| Persondays per household | 43 | 43 | 48 | 54 | 47 |
| Expenditure (in Rs. Crores) | 8823.35 | 15856.89 | 27250.10 | 37905.23 | 39377.27 |
| *Of which wages* | 66% | 68% | 67% | 70% | 68% |
| Average Wage paid per personday | 65 | 75 | 84 | 90 | 100 |

*Source:* nrega.nic.in

## 7.4 'EXOGENOUS' ADMINISTERED FOOD PRICE HIKES?

In accordance with the supply shock view, many economists and others have attributed the rise in inflation, especially in food prices, to exogenous hikes in the *Minimum Support Price* (MSP) at which the government procures food grains or other food items from farmers. The Central Government specifies the MSP taking into account the recommendations of the Committee on Agricultural Costs and Prices (CACP), based on its input cost calculations. Both the Economic Survey of the Government of India (2011) and a comprehensive study of inflation by the RBI (Mohanty, 2010) have pointed to the hiking of MSPs as triggering food inflation and thereby overall inflation.

The pricing of MSP is a little complicated. Over and above the Central Government specified MSP there are State additions to the MSP. Politicians seeking votes have an incentive to offer higher MSPs, and there is undoubtedly a political element to the setting of MSPs. In Uttar Pradesh, the most populous state and particularly well known for its populist policies, the MSP has been highest under former Chief Minister Mayawati. Thus populist policies are often seen as the factor behind higher MSPs, which in turn are seen as the driver of food inflation and thus overall inflation. A vociferous and prolific proponent of this view concludes, on the basis of regressions for the CPI, that a 10% hike in the MSP leads to a 3 % rise in overall inflation.

However, the arguments and evidence supporting this view is weak. To begin with, procurement prices are raised in response to rising wage and input costs. These rising costs, similar to hikes in the minimum wage due to inflation, are part and parcel of the EAPC process. During 2003-2007 when inflation stayed low, MSP hikes were minimal and were raised sharply only after 2008.[12]

In his response to Bhalla (2012), the former Commissioner on Agricultural Costs and Prices, Gulati (2012) pointed out that

[12] This has been stressed by Moorthy and Kolhar (2011), who have reproduced the Table from Mohanty (2010) showing that higher MSPs from 2007/08 onwards have been correlated with higher WPIs.

"The labour cost of production of most of the crops have escalated sharply in the last three years, primarily led by labour costs. Labor costs for example have risen by 74% in the second half of 2001 over the second half of 2008 at the all India level. Farmers in Andhra Pradesh declared a crop holiday since paddy is no more remunerative and the area under paddy fell from 4.8 Mha to 2Mha in 2011-12."

More generally, what starts off as a demand driven process appears to be cost push (Section 3.4.1). Statistical causality tests can be misleading since the change in MSP (the discrete statistically exogenous 'event') *immediately* impacts market prices.[13] By contrast, the pass through from rising consumer prices via the IAPC into wage and input costs, and then into the setting of MSPs is diffused, and distorted by politics. As a result the causality tests may show that changes in MSP lead to general inflation and not vice-versa.

Further evidence against the view that food inflation is due to MSP hikes comes from comparing food items that have a MSP and those that do not, during the stagflation period. As the Table 7.G shows, prices for most commodities *without MSP rose faster*.

**Table 7.G** Grain and Other Food Items Price Rise During 2008-2012

| Commodities with MSP | % Rise | Commodities without MSP | % Rise |
|---|---|---|---|
| Jowar | 49 | Bengal Gram Dal | 65 |
| Maize | 43 | Cumin Seeds | 34 |
| Ragi | 88 | Eggs | 111 |
| Bajra | 13 | Gur | 58 |
| Rice | 29 | Kabuli Channa | 101 |
| Wheat | 32 | Other Pulses | 50 |
| Unweighted Average | 42 | Unweighted Average | 70 |

*Source:* See article by Manur (2012) based on agmark.com

This simple controlled comparison, although for a few commodities, suggests the MSP view is invalid. As an auxiliary matter, protein intensive food items (e.g., eggs in the above table) have risen faster than the others, the implications of which are analyzed in the following Section.

In this connection, it is worth evaluating Bhalla's view that MSP is the major determinant of CPI(IW) inflation in India.[14] In a follow-up article, Bhalla (2014) reports the following result:

CPI(IW) = 5.075 + 0.32(Lagged Procurement Price Inflation)

with annual data for 1978-2004. He then uses it to predict inflation out of sample for 2005-2014 and finds the prediction error to be small. He concludes that, "the Indian inflation

[13] Statistical Granger Causality tests between variables *X* and *Y* try to ascertain from lagged values in regressions. Specifically if *Y* is regressed on past values of *Y* and also past values of *X*, and the *X* values are significant, but not the other way around, then *X* can be said to cause *Y*.

[14] There have been many more proponents of the food supply shock and/or MSP view of India's inflation; for brevity only a few proponents have been cited here.

model is a one variable, one trick pony". Assuming the validity of the regression results, the conclusion is still questionable. From 1947 to 1975, when there was no MSP policy, the pony is missing. So, what explains inflation up to 1975? A proper explanation of inflation cannot be based only on a variable that exists only in a certain economy for some period. The standard macroeconomic variables (inflation expectations, money growth, interest rates, fiscal deficits, unemployment etc, some of which he mentions) need to be analyzed since they are always present in all economies in all periods.

## 7.5 A PROTEIN CENTRIC VIEW OF INDIA'S INFLATION

In Chapter 3, 'Cost Push, Demand Pull, and Stagflation,' the classical critique of the supply shock view was outlined. A rise in the price of one item will push up its relative price but not its absolute price or the price level. To briefly recap the argument of Milton Friedman, a supply shock that raises the price for a large item with inelastic demand will lead to less spending on other items, whose prices will thus fall (Section 4.2). The overall price level, as a first approximation, will not rise.[15] More generally, supply shocks are intrinsically random. Since they are both positive and negative supply shocks due to good and bad weather respectively, they should cancel out, with no impact on average.

Macroeconomic thinking about inflation in India predominantly stresses supply side factors. While food supply and other shocks lead to a rise in the price level and thereby a one-time rise in inflation, whether they can cause inflation, which is a sustained rise in prices, is doubtful. During the famous onion crisis in India, the CPI jumped from 366 in November 1997 to 438 in November 1998 with a corresponding y-o-y inflation rate of 19.7% for that month. For November 1999, the CPI was 438 and the inflation rate was zero, a dramatic example of the 'base effect', a term widely used in India.

However, if agricultural output continues to fall or grow slowly, then food prices can rise every period. The view that supply shocks have been the source of India's inflation had been repeatedly espoused by former RBI Deputy Governor Dr. Subir Gokarn since an inaugural Address, "The Price of Protein" (2010). Various RBI publications had been reporting and examining the contribution of protein and sub-protein items (meat, fish, eggs, pulses and also milk) to inflation. The press would also report these data quite often.

According to the former Deputy Governor, as real incomes have been growing rapidly, consumers were upscaling to protein items at the expense of cheaper carbohydrates -- mostly rice and wheat. In this process food grains get diverted away from direct consumption to feeding livestock for meat. At the same time, overall agricultural production had not kept pace with the rest of the economy. For the five years ending 2010, agriculture grew by 3.1%, while the rest of the economy grew much faster. The result of growing demand and slowing supply has been a double whammy for food prices, and indirectly protein prices.

[15] Building on this logic, Moorthy and Kolhar (Rising Food Prices and India's Monetary Policy, 2011) develop a model of two items (food and non-food) and two consumers (rich and poor) to simulate and explain inflation dynamics as measured by different price indices. This whole section relies upon (Moorthy, 2012).