Grief in Brief: A Tale of Farmers' Distress

Ashutosh Sharma[1] & Abodh Kumar[2]
[1]Researcher at IRADe, New Delhi.
[2]Visiting Fellow LSE & Assistant Professor, Department of Economic Studies and Policy, School of Social Sciences and Policy, Central University of South Bihar, Gaya (Bihar)

Received: October 05, 2018 Accepted: November 05, 2018

ABSTRACT *This essay analyses the farmers return for pulses, Onion and Potato over a period of five years. The finding suggestsdespite bumper harvest in 2016-17, Pigeon pea (Tur), Onion and Potato growing farmers are incurring losses on their cost production in 2016-17. Farmers growing Pigeon pea, Onion and Potato are providing a subsidy to consumers by selling their produce at less than the production cost and we term it "Farmers Subsidy". The Lentil farmers net return had also fallen abysmally due to price crash. The falling prices will severely dent farmers "balance sheet" leading to dissaving or increased debt. The government policy over the years had remained pro-consumer highlighted in several reports. The policies relating to imports and exports and trade tariffs are pursuedby Government, where the voice of the peasants is the weakest.Export of pulses are prohibited along with zero duty on pulses import. The figures for net return on MSP and imposition of import duty on Wheat, suggests that Government is concerned for the Wheat farmers and region. Similar, concern is needed for Pulses, Potatoes and Onions farmers. The requisite policy would be, when prices go very highGovernment reduce import duty and increase it when prices exhibit downward trend. It is important to understand that unless farmers fetch a better price, their grief and distress is going to mount over the years. It will lead to further round of strikes, protest, agitation and may be followed by a debt relief package. But it will not solve the grass-root problem. If concrete steps are not taken within time peasantry will become a curse in India.*

Keywords:

1. Introduction

It was March 2017 when the country witnesses an unprecedented form of protest from Tamil Nadu farmers who were expressing their plight in Delhi, holding dead snakes and rats in their mouths with the skulls of dead fellow farmers who had committed suicide. Although it was a new method that farmers had opted to seek attention of this country to their distress; the tale of their misery was never new. Moreover, by the beginning of June 2017, farmers in two of the largest states of Madhya Pradesh and Maharashtra also resorted to agitation in the view of dwindling farm income. Farmers in these states are claiming that they are not getting adequate prices for their crop. Reportedly, the agitation had turned violent in Madhya Pradesh witnessing bloodshed of the farmers followed by rounds of compensation revision by the state government for the deceased farmer's family. A section in the country may have the opinion that the ongoing farmers' agitation has been triggered by the recent farm loan waiver in Uttar Pradesh. Apparently some may also feel that the agitations are provoked by opposition parties in the state. However, nobody can't deny the timing of this agitation which conspicuously coincides with the post Rabi harvest season and indicates a much deep root cause.

However, going by the latest reports, as a ripple effect, Maharashtra state government on June 11th 2017 had agreed to waive the loans of small and marginal farmers with immediate effect and promised to form a committee to fix the criteria on which further waiver will be sanctioned. In contrast, a couple of months back, the editorial published in EPW "No Panacea for Agrarian Distress" on April 15, 2017, points out that loan waivers do not address the deep-rooted problems of India's farmers. Further it highlights that there are a host of factors that have adversely affected the "balance-sheets" of Indian farmers which needs to be recognized. Recently, the RBI in its second Bi-monthly Monetary Policy Statement for 2017-18 noted that the surprising softness in CPI is caused due to sharp fall in food inflation, brought about by a deflation in the prices of pulses and vegetables. The falling prices of pulses and vegetables indicate that there may be some merit in the farmers' claim of dwindling agrarian economy. This essay tries to carry out an analysis of the farmers' return for Wheat, Pigeon pea (Tur) , Gram, Lentil, Potato and Onion. This is also relevant because the year 2017 marks the Prime Minister's promise of doubling the farmers' income by 2022, whether real or nominal is still unclear.

2.Background

India received nearly normal rainfall in 2016-17 after two consecutive drought years. The third advance estimates for 2016-17 shows that total foodgrain production increased from 251.57 in 2015-16 to 273.38million tonnes in 2016-17 reflecting 8.7% increase(Department of Agriculture Cooperation & Farmers Welfare (DAC&FW), 2017b). **Table 1** shows the production estimate for Wheat, Pulses, Onion and Potato in the year 2016-17 and its growth over 2015-16.

Table 1: Crop production in million tonnes and growth rate

Crop	2015-16	2016-17	Growth rate
Wheat	92.29	97.44	5.58%
Total Pulses	16.35	22.40	37.00%
Potato	43.41	46.54	7.21%
Onion	20.93	21.56	3.02%

Source: Third advance estimates of production of Foodgrains for 2016-17 and Horticulture Crops Estimates for the Year 2016-17(Second Advance Estimates)(DAC&FW, 2017b and DAC&FW, 2017c).

Table 1show that total pulses production increased by remarkably 37% in 2016-17 over 2015-16. Partly this is attributed to the increase in cropped area under pulses and partly due to increase in yield. For instance, as compared to 2015-16 combined pulses area under Rabi and Kharif crops increased from 25.69 to 30.59 million hectares in 2016-17, reflecting a 19% increase in pulses area (DAC&FW, 2016 and 2017a). In June 2015, the Prime Minister of India had asked every farmer to try and grow pulses on a part of their land and raise the level of pulses production to help make India self-sufficient in pulses (PIB, 2015). The growth in area ofpulsesindicates that apart from market dynamics, farmers may have followed the Prime Minister's call.Production of wheat, Potato and Onion also witnessed a significant growth in 2016-17 over 2015-16.

Table 2: Crop yield (in quintals per hectare)

Crop	2012-13	2013-14	2014-15	2015-16	2016-17
Wheat	31.17	31.45	27.50	31.30	34.34*
Gram	10.36	9.60	8.89	8.77	9.17*
Pigeon pea	7.76	8.13	7.29	6.80	8.71*
Lentil	7.97	7.58	7.05	7.53#	7.53#
Potato	227.60	210.60	231.27	205.09	215.09
Onion	159.89	161.20	161.31	158.57	169.80

Source:Compiled from various issues of Agricultural Statistics at Glance published Ministry of Agriculture and Farmers Welfare (MoA&FW) and DES;Commission for Agricultural Costs and Prices (CACP),2016b); Area and Production estimates (DAC&FW, 2016, 2017a, 2017 b,2017c).

* For 2016-17 yield has been calculatedby dividing the third estimate of production figures by area under crop for 2015-16 (DAC&FW).

For lentil both area and production has been not available separately, therefore the figure for 2015-16 and 2016-17 is the average of reported yield for 2012-13, 2013-14 and 2014-15.

The yield estimate reported in table 2 highlights that the yields of selected crops improved in 2016-17 over 2015-16[1].Despite these positive production statistics for 2016-17, farmers are in distress.The prevailing concept in India postulates that good monsoon willimprove farm output and thereby increase rural income.It seems that this hypothesis maynot be working as it has assumed to be. A bumper crop production could put downward pressure on pricesin theharvest season leading to less gain or even losses for farmers; if prices get too much suppressed.

The distress is more for marginal, small and semi-medium farmers who lack the capacity to stock their produce in the harvest season. They sell their produce normally onthe harvest season prices. Moreover, in absence of adequate storage facility farmers growing perishable crops like Onion and Potato are also compelled to sell their produce at harvest season prices. In addition to these factors, selling of produce at harvest season prices also arises in order to repay the input loans and to meet the household consumption expenditure. It means that if prices fall sharply in the harvest season, majority of farmers are left with very less choicesto avoid distress selling.**Table 3** presents the farmers' classification according to the area of operation. Nearly 68% of net sown area is operated by Marginal, Small and Semi-medium farmers and only nearly 11 percent of sown area is operated by large farmers.

Table 3: Farmer classification according to area operated ('000' ha.)

Size-class	Total Area Operated	Total Gross Cropped Area	Percentage distribution of Area Operated
Marginal Farmers (<1 ha.)	35410	43400	22.2
Small Farmers (1-2 ha.)	35136	43064	22.1
Semi-medium Farmers (2-4 ha.)	37547	46019	23.6
Medium Farmers (4-10 ha.)	33709	41315	21.2
Large Farmers (> 10 ha.)	17379	21301	10.9
Total	159181	195100	100.0

Source: Adapted from Price policy for Rabi crops The Marketing Season 2016-17 (CACP, 2015b)

In order to understand the farmers' distress, it is imperative to see how prices behaved during the harvest season over the years. To carry out this analysis, we have collected state wise and crop wise monthly average *Mandi* price data from http://agmarknet.gov.in/ for the harvesting season. For Wheat, Gram, Lentil and Onion we have taken state wise average monthly price dataforMarch, April and May; for Pigeon pea we have takenstate wise average monthly price data forFebruary, Marchand April; for Potato we have taken average monthly price data forJanuary, Februaryand March[2]. All India level year wiseharvest season price for a particular crop was estimated using two steps. In the first step, simple mean of the state's monthly *Mandi* priceswas takento calculate the all India price for aparticular month.Further,the average of monthly all India prices was takento computethe all India harvesting season price for a particular crop and in a particular year. Though *Mandi* prices do not always reflect the actual price which farmers get for their produce[3], it is the most comprehensiveand reliable crop price dataavailable and it is sufficient to provide the direction and trend of prices.

Table 4: Harvest season price trend (in Rs./qt.) and percentage change

Crop	2013	2014	2015	2016	2017	% change over 2012-13	% change over 2015-16
Wheat	1515	1625	1559	1625	1739	14.81	7.03
Gram	3322	2863	3784	4995	5696	71.44	14.04
Pigeon pea	4463	4462	5529	7674	4007	-10.21	-47.78
Lentil	3456	3604	4764	5049	3900	12.85	-22.76
Potato	585	790	555	715	436	-25.40	-38.99
Onion	770	724	1144	611	556	-27.81	-8.97

Source: http://agmarknet.gov.in/

As compared to 2013, the harvest season *Mandi*price for Pigeon pea, Potato and Onion were lower 10.21%, 25.40% and 27.81% respectively in 2017. This reflects that farmers growing these crops are getting much lower prices this year even compared to 2013. Moreover, as compared to 2016, the harvest season *Mandi*price for Pigeon pea, Lentil, Potato and Onion were lower 47.78%, 22.76%, 38.99% and 8.97% respectively in 2017. The falling pulse and vegetable prices may bring reasons to cheer for RBI, Consumers and the Government, but the dark side is that rural economy may be in severe distress due to rising cost of production coupled with nearly stagnant yield and falling prices.

3. Economics of Farmers' Return

This section examines the cost and profitability of selected crops based on the available data.CACP prepares its cost projections on the basis of latest three years' cost estimates furnished by the Directorate of Economics and Statistics (DES), Ministry of Agriculture & Farmers Welfare under Comprehensive Scheme (CS) for studying the Cost of Cultivation of Principal Crops in India, which is generally available with a time lag of two years (CACP, 2016b)[4].For this study, we have taken the projected cost of production and minimum support price (MSP) for last five years from the various year publications of CACP on "Price Policy forRabi Crops"and "Price Policy for Kharif Crops"[5]. For the analysis, we have used C2 cost of production which is comprehensive cost including imputed rent and interest on owned land and capital respectively. The yield data has been used from **Table 2**, harvest season Mandi price data has been used from **Table 4**. Onion and Potato are not covered under MSP scheme and therefore C2 cost of production is not available at national level. To overcome this problem, we have constructed the C2 cost of production for Onion and Potato for the year 2012-13 and 2013-14 using state wise cost of production data available from DES.The cost of cultivation data on DES website is only available till 2013-14 as on 11th June 2017.We have followed

the CACP methodology to arrive at the C2 cost of production for Onion and Potato. The cost estimates are madeavailable to the Commission by DES at state level, which are thenaggregated at national level, by using production shares of therespective state, to calculate the all India weighted average cost ofproduction. (Appendix A, Table 1 and 2). Table 5-10 presents crop wise net return on Mandi prices and on MSP.

Table 5. All India net return of Wheat per hectare from 2012-13 to 2016-17

Wheat	Cost of production C2 (Rs./qt.)	Yield per hectare (in qt.)	Harvest season Mandi price (Rs./qt.)	MSP (Rs./qt.)	Margin on Mandi prices (Rs./qt.)	Net Return on Mandi Prices (Rs./ha.)	Margin on MSP (Rs./qt.)	Net Return on MSP (Rs./ha.)
Years	(1)	(2)	(3)	(4)	(5= 3-1)	(6 = 5*2)	(7= 4-1)	(8 = 7*2)
2012-13	1066	31.2	1515	1350	448	13974	284	8844
2013-14	1109	31.5	1625	1400	516	16235	291	9165
2014-15	1147	27.5	1559	1450	412	11334	303	8333
2015-16	1163	31.3	1625	1525	462	14450	362	11331
2016-17	1203	34.3	1739	1625	536	18407	422	14493

The result in **table 5** suggests that all India level Wheat farmers have never incurred negative return either on Mandi price or MSP for the period of analysis. Compared to 2013-14, per hectare net return on Wheat at Mandi prices remain lower for two consecutive years 2014-15 and 2015-16, whereas at MSP it was lower only in 2014-15.

At Mandi prices, farmers growing Gram recovered only the cost of production in 2013-14 and in 2014-15 net return remained lower compared to 2012-13. Compared to Wheat, net return per hectare for Gram at Mandi prices were higher only in 2015-16 and 2016-17 (**Table 5 & 6**). Thenet return per hectare for Gram on MSP is much lower than Wheat, for the period of analysis. It reflects thatgovernment is not providing adequate margin for Gram farmers over cost of production through MSP, so that the gap between per hectare net return on Wheat and Gram shrinks over the years.

Table 6. All India net return of Gram per hectare from 2012-13 to 2016-17

Gram	Cost of production C2 (Rs./qt.)	Yield per hectare (in qt.)	Harvest season Mandi price (Rs./qt.)	MSP (Rs./qt.)	Margin on Mandi prices (Rs./qt.)	Net Return on Mandi Prices (Rs./ha.)	Margin on MSP (Rs./qt.)	Net Return on MSP (Rs./ha.)
Years	(1)	(2)	(3)	(4)	(5= 3-1)	(6 = 5*2)	(7= 4-1)	(8 = 7*2)
2012-13	2328	10.4	3322	3000	995	10305	672	6965
2013-14	2865	9.6	2863	3100	-2	-16	235	2256
2014-15	2981	8.9	3784	3175	803	7136	194	1725
2015-16	3102	8.8	4995	3500	1893	16600	398	3490
2016-17	3185	9.2	5696	4000	2511	23027	815	7474

Table 7. All India net return of Pigeon pea (Tur) per hectare from 2012-13 to 2016-17

Pigeon pea	Cost of production C2(Rs./qt.)	Yield per hectare (in qt.)	Harvest season Mandi price (Rs./qt.)	MSP (Rs./qt.)	Margin on Mandi prices (Rs./qt.)	Net Return on Mandi Prices (Rs./ha.)	Margin on MSP (Rs./qt.)	Net Return on MSP (Rs./ha.)
Years	(1)	(2)	(3)	(4)	(5= 3-1)	(6 = 5*2)	(7= 4-1)	(8 = 7*2)
2012-13	4167	7.8	4463	3850	296	2296	-317	-2461
2013-14	3958	8.1	4462	4300	504	4098	342	2783
2014-15	4214	7.3	5529	4350	1315	9584	136	988
2015-16	4272	6.8	7674	4625	3402	23132	353	2400
2016-17	4314	8.7	4007	5050	-307	-2672	736	6411

The Mandi price ofPigeon pea is lower than the MSP by more than Rs. 1000 in 2017 and surprisingly it is also lower than 2013harvest season Mandi price. Farmers' net return per hectare for Pigeon pea, at Mandi priceis negative for 2016-17 output (**Table 7**).Farmers growing pigeon pea are not being able to recover even the cost of production for 2016-17 crop. The net return for Pigeon pea in 2016-17 per quintal overproduction cost is minus Rs. 307. We term the monetary loss per quintal over cost of production is the subsidy farmers are giving to consumers from their own pockets as"**Farmers Subsidy**".So for 2016-17 Pigeon pea production,"**Farmers Subsidy**" is Rs. 307per quintal to consumers.**Table 7** clearly reveals that Pigeon pea growers witnessed huge fall in net income per hectare in 2016-17 as compared to 2015-16. Further, in the last five years 2016-17 is the only year for which net return per hectare is negative. At Mandi prices net return per hectare for Pigeon pea,as compared to Wheat, was higher only for 2015-16 production (**Table 5 & 7**). At MSP, thenet return per hectare for Pigeon pea isonly 30% of Wheat for 2016-17production.

The net return per hectare for Lentil growing farmers isonly Rs. 4067 in 2016-17, down by nearly Rs. 10,000 compared to 2015-16 (**Table 8**). The Mandi price for Lentil crops in 2017 is below the MSP and month on month Lentil prices is showing a downward trend. The average all India price for Lentil is Rs. 3595 in May, 2017.

Table 8. All India net return of Lentil per hectare from 2012-13 to 2016-17

Lentil	Cost of production **C2** (Rs./qt.)	Yield per hectare (in qt.)	Harvest season Mandi price (Rs./qt.)	MSP (Rs./qt.)	Margin on Mandi prices (Rs./qt.)	Net Return on Mandi Prices (Rs./ha.)	Margin on MSP (Rs./qt.)	Net Return on MSP (Rs./ha.)
Years	(1)	(2)	(3)	(4)	(5= 3-1)	(6 = 5*2)	(7= 4-1)	(8 = 7*2)
2012-13	3162	8.0	3456	2900	294	2347	-262	-2084
2013-14	2760	7.6	3604	2950	844	6395	190	1440
2014-15	2952	7.1	4764	3075	1812	12772	123	867
2015-16*	3098	7.5	5049	3400	1951	14699	302	2275
2016-17*	3360	7.5	3900	3950	540	4067	590	4443

* For 2015-16 and 2016-17 yield is average of 2012-13, 2013-14 and 2014-15.

Farmers growing Potato have witnessed consecutive losses in the past three years (**Table 9**). In 2017, Mandi prices were lower than the 2013 prices. For each quintal potato production in 2016-17, farmers suffered a loss of Rs. 324. So, in 2017 potato farmers are giving a **"Farmers Subsidy"** of Rs. 324 per quintal to consumers. Per hectare net return for potato is minus Rs. 69,715. How the Potato farmers will survive, who have reaped only losses in the past three years?

Table 9. All India net return of Potato per hectare from 2012-13 to 2016-17

Potato	Cost of production **C2** (Rs./qt.)	Yield per hectare (in qt.)	Harvest season Mandi price (Rs./qt.)	Margin on Mandi prices (Rs./qt.)	Net Return on Mandi Prices (Rs./qt.)
Years	(1)	(2)	(3)	(4= 3-1)	(5 = 4*2)
2012-13	471	228	585	114	25972
2013-14	676	211	790	114	24054
2014-15*	703	231	555	-148	-34240
2015-16*	731	205	715	-16	-3291
2016-17*	760	215	436	-324	-69715

* In absence of Cost data we have inflated the cost of production (C2) by 4 percent starting 2014-15.

Table 10. All India net return of Onion per hectare from 2012-13 to 2016-17

Onion	Cost of production **C2** (Rs./qt.)	Yield per hectare (in qt.)	Harvest season Mandi price (Rs./qt.)	Margin on Mandi prices (Rs./qt.)	Net Return on Mandi Prices (Rs./qt.)
Years	(1)	(2)	(3)	(4= 3-1)	(5 = 4*2)
2012-13	648	160	770	122	19492
2013-14	863	161	724	-139	-22442
2014-15*	898	161	1144	246	39673
2015-16*	934	159	611	-323	-51266
2016-17*	971	170	556	-415	-70536

* In absence of Cost data we have inflated the cost of production (C2) by 4 percent starting 2014-15

The story of Onion farmers is not very different from the Potato farmers. In the past 5 years, only for the production year 2012-13 and 2014-15, Onion farmers have earned a positive margin of Rs. 122 and Rs. 246 per quintal, respectively. The prevailing Mandi prices in 2016 and 2017 were lower than 2013. For the year 2015-16 production, Onion farmers incurred a loss of Rs. 323 per quintal translating into Rs 51,266 loss per hectare. In 2016-17, yield increased but prices fell even compared to 2016, resulting in "**Farmers Subsidy**" of Rs. 415 per quintal to consumers. For 2016-17 production, per hectare Onion Farmers incurred a loss of Rs. 70,536.

Based on the finding in this section we try to understand the Farmers distress through 1-hectare economy. Figure 1 plots the net return per hectare for selected crops in 2016-17 at Mandi prices.

Figure 1:**Crop wise per hectare net return on Mandi prices in 2016-17 (in Rs.)**

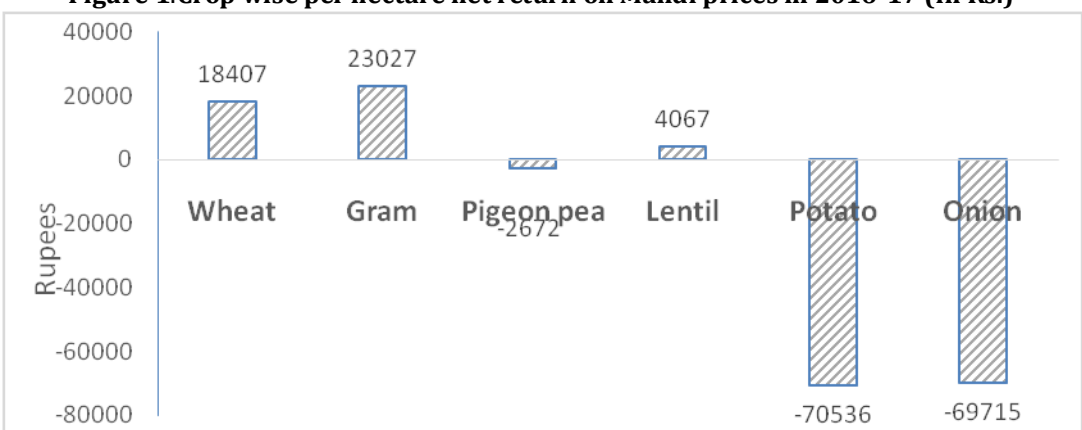

Figure 1 shows that in year 2016-17, if the farmer had sown Wheat on 1 hectare of land, he/she will have a surplus Rs. 18407, by sowing Gram on 1 hectare he/she will have a surplus of Rs. 23027 and if the farmer had sown Lentil, still he/she will have a surplus of Rs. 4067 but very low. These surpluses over cost of production can be enjoyed by the farmers, growing these crops, for household consumption and other needs. On the other hand,in 2016-17, by sowing pigeon pea, Potato or Onion farmer will have to arrange Rs. 2672, Rs. 70536 and Rs. 69715 respectively to replenish/repay the cultivation cost. Apart from this replenishment/repayment need, the farmer will also need money for the monthly family consumption. The farmer who sweat and toiled in his field, arranged money for input cost sometimes even by foregoing his/her essential needs, remained anxious day and night about weather vagaries, saved the crop from diseases starting from sowing to harvesting is left with a loss due to Government apathy and policies.Farmers of India are squeezed from both sides- rising cost of production on hand andfalling prices due to faulty agro-commodity trade policy.

4. Discussion

The rise in pulse and onion prices hits national headlines in print as well as electronic media and to bring its prices down Government uses trade, tariff and administrative means to contain pressure on prices in the market. Today no such action is still visible to provide relieve to farmersfrom distress. Several reports and studies have argued that agrarian distress is the result of the policies pursued by the governments over the years.

Import duty on pulses was brought down from 10 percent to zero percent in June,2006 and continues to be zero percent since then. Export of pulses was prohibitedin June, 2006, initially for a period of six months which has been extended fromtime to time and latest being in March, 2014. However, in order to restrict wheat imports, theGovernment imposed import duty of 10 percent on wheat in August, 2015, whichwas further increased to 25 percent in October 2015.

Ample Government reports are available suggesting ways to improve policies related to pulses. CACP (2012b) noted that "This restrictive export policy along with free importsof pulses at zero import duty clearly shows a pro-consumer bias. This needs tochange and exports need to be fully opened also to have a neutral trade policy". CACP (2012b) recommended that imports of pulses should have a 10 percent import duty for the next three years to promote their production at home. Similarly,CACP (2013b) also noted that "This restrictive export policy (for pulses) along with free imports clearly shows a pro-consumer bias and needs to change in order to take into account producer interest as well". This commission also

recommended fully opening of Exports to have a neutral trade policy for producers as well as consumers and a 10 percent import duty for the next three years on imports of pulses to promote domestic production.
More recently Subramanian Committee(2016) report for Pulses says that immediately "Eliminate export ban on pulses and stock limits; at the very leastlimits on wholesalers should be eliminated. The worst case scenario for farmers is weak procurementand stock limits which force farmers to sell most of their outputat market prices that are well below MSP." The report suggests that the use of trade policy to control domesticprices, which induces policy volatility, should be avoided andalso points out that short-term action that apparentlybenefit consumers end up hurting them because production and availability of pulses decline over time.Subramanian Committee also finds that production of pulses is much riskier than cereals and there is a need to provide a price premium for growing pulses.
There is no dearth of reports prepared by Government agencies to improve returns for Pulse farmers; the only problem is Government is turning a deaf ear to all these recommendations. The imposition of import duty on Wheat indicates a sympathetic stance to Wheat growing region and Farmers.On the contrary an indifferent attitude and lack of any such actions for pulses suggests Government's reluctance to help out Pulse farmers. Similarly, in case of Onions, it is observed that the customary approach adopted by Government is to hike the minimum export price (MEP) of onions for boosting domestic supplies while curbing exports. For instance, on 22nd August 2015, the Union government hiked the minimum export price (MEP) of onions sharply by $275 per tonne making it $700 per tonne from $425 per tonne. But this year no effort is visible to safeguard the Onion farmers so far. The on-and-off export policy for Onion is hurting deeply the Onion exports and therefore the farmers.
CACP (2013b) points out that India's agri-export policy for most of the commodities has been a "residual policy". Suri (2006) seems to be right in pointing out that growth of agriculture in India was looked upon as a means to achieve some other end and improvement in the living conditions of the farmers itself was not the objective. The pulse story is no different in India where the aim of Government is to have self-sufficient production for maintaining low food prices for the consumers.

5. Conclusion

Political parties and Media are busy in determining nature and causes of farmers' agitation. The economic analysis suggests that the explanation of these lies in the return farmers are receiving for their crop. Lower return and losses leads to mounting debt burden. "Farm Loan waiver" definitely cannot be a policy choice which has several negative externalities highlighted by Central Bank, Economists and Political Pundits. The agriculture policy should target at keeping the prices right. For instance, Government has ensured decent net returns for Wheat and also took effective trade measures to help Wheat growing farmers. Similar steps are needed for Pulses, Potato and Onion which are considered to be "Kitchen-Staple". Moreover, the margin under MSP on pulses should be increased significantly compared Wheat, so that the difference in net return per hectare at MSP shrinks.
The crumbling prices of pulses and vegetables might have given the reasons to policy maker to pat their own back,but the consequence of agrarian distress will have far fetching impact on the economy ranging from reduced rural consumption demand despite good monsoon, increased credit default, increased migration to cities and last but not the least, shift in cropping pattern. If the prices do not improve, the bumper harvest of Pulses, Onion and Potato this year will become history and self-sufficiency for pulses will remaina distant dream

References:

1. CACP, GoI (2012a): Price Policy for Kharif Crops: The Marketing Season 2012-13.
2. CACP, GoI (2012b): Price Policy for Rabi Crops: The Marketing Season 2013-14.
3. CACP, GoI (2013a): Price Policy for Kharif Crops: The Marketing Season 2013-14.
4. CACP, GoI (2013b): Price Policy for Rabi Crops: The Marketing Season 2014-15.
5. CACP, GoI (2014a): Price Policy for Kharif Crops: The Marketing Season 2014-15.
6. CACP, GoI (2014b): Price Policy for Rabi Crops: The Marketing Season 2015-16.
7. CACP, GoI (2015a): Price Policy for Kharif Crops: The Marketing Season 2015-16.
8. CACP, GoI (2015b): Price Policy for Rabi Crops: The Marketing Season 2016-17.
9. CACP, GoI (2016a): Price Policy for Kharif Crops: The Marketing Season 2016-17.
10. CACP, GoI (2016b): Price Policy for Rabi Crops: The Marketing Season 2017-18.
11. CACP, GoI (2016): Price Policy for Rabi Crops: The Marketing Season 2017-18.
12. DAC&FW, GoI (2016): All India Crop Situation – Kharif (2016-17) as on 30.09.2016.
13. DAC&FW, GoI (2017 a): Area Coverage under Rabi Crops as on 03.02.2017.
14. DAC&FW, GoI (2017 b): Third Advance Estimates of Production of Foodgrains for 2016-17.

15. DAC&FW, GoI (2017 c): Horticulture Crops Estimates for the Year 2016-17(Second Advance Estimates).
16. Editorial (2017): "No Panacea for Agrarian Distress", Economic & Political Weekly, 52(15): 8-8.
17. MoA&FW and DES, GoI (2013): Agricultural Statistics at a Glance 2013.
18. MoA&FW and DES, GoI (2015): Agricultural Statistics at a Glance 2014.
19. MoA&FW and DES, GoI (2016): Agricultural Statistics at a Glance 2015.
20. Press Information Bureau, GoI (2015): Prime Minister Calls upon Farmers to Raise the Level of Pulses Production in the Country, http://pib.nic.in/newsite/PrintRelease.aspx?relid=122850.
21. Subramanian, A (2016): Incentivising Pulses Production Through Minimum Support Price (MSP) and Related Policies, Committee Report.
22. Suri, K C (2006): "Political Economy of Agrarian Distress", Economic & Political Weekly, 41(12): 1523-29.

[1] In absence of area and production data availability for lentil, we have taken the average yield value of 2012-13, 2013-14 and 2014-15 and had reported for 2015-16 and 2016-17 as indicative.

[2] For a particular crop, we have considered monthly Mandi prices for major producing state. Wheat average monthly Mandi price data has been considered for Chattisgarh, Gujarat, Haryana, Jharkhand, Madhya Pradesh, Maharashtra, Punjab, Rajasthan, Uttar Pradesh, Uttarakhand and West Bengal. For Gram we have taken average monthly Mandi price data for Andhra Pradesh, Chhatisgarh, Karnataka, Madhya Pradesh, Maharashtra, Rajasthan and Uttar Pradesh. Tur average monthly Mandi prices is for Gujarat, Karnataka,Madhya Pradesh, Maharashtra, Odisha and Uttar Pradesh. Lentil average monthly Mandi prices have been taken for Chattisgarh and Madhya Pradesh. Potato average Mandi price is for Uttar Pradesh and West Bengal. Onion average Mandi prices are for Andhra Pradesh, Gujarat, Karnataka and Maharashtra.

[3] There are middlemen involved in the marketing of crops who pay less to the farmers compared to the Mandi prices. Even if farmers take his produce to the *Mandi*it involves packaging and transportation cost thereby reducing their gross as well as net return per quintal.

[4]However, how accurate these projected costs are in relation to actual costs is a matter of ex-post analysis.

[5] We have added the bonus in MSP, if bonus has been given for a particular crop in a particular year.

Appendix A

Table A1: All India cost of production for Potato in 2012-13 and 2013-14

States	2012-13				2013-14			
	C2 (in Rs.)	Shares in Production	Weights	Weghted C2 (in Rs.)	C2 (in Rs.)	Shares in Production	Weights	Weghted C2 (in Rs.)
	(1)	(2)	(3)	(4= 1*3)	(5)	(6)	(7)	(8 =5*7)
Bihar	406	15	20	82	515	16	22	114
Himachal Pradesh	1237	0	1	7	907	1	1	7
Uttar Pradesh	493	32	44	216	707	33	47	330
West Bengal	469	26	35	166	738	22	30	225
All india C2				**471**				**676**

Table A2: All India cost of production for Onion in 2012-13 and 2013-14

States	2012-13				2013-14			
	C2 (in Rs.)	Shares in Production	Weights	Weighted C2 (in Rs.)	C2 (in Rs.)	Shares in Production	Weights	Weghted C2 (in Rs.)
	(1)	(2)	(3)	(4= 1*3)	(5)	(6)	(7)	(8 =5*7)
Andhra Pradesh	630	9	17	105	1629.75	5	9	152
Gujarat	692	4	8	52	662.1	10	17	114
Karnataka	962	14	26	247	973.3	11	19	186
Maharashtra	486	28	50	243	756.94	30	54	412
All india C2				**648**				**863**