on risk involved, are being charged. These premium rates vary from crop to crop, area to area and from season to season. While bringing improvement in crop insurance schemes is a continuous process, there is no proposal at present to revise the premium rates under Crop Insurance Schemes. However, to make the scheme affordable for farmers, premium subsidy upto 75% of premium is provided by the Government.

- (b) National Crop Insurance Programme (NCIP) provides for capacity building of officials/farmers' groups through specialized trainings, workshops, publicity/awareness, etc. The Administrative Staff College of India (ASCI), Hyderabad, Agriculture Insurance Company of India Ltd. (AIC), etc. Conduct periodical workshops/sensitization programmes on crop insurance. State Governments and insurance companies also publicize crop insurance through advertisements, conferences, kisan gosthis, fairs, etc.
- (c) The response of farmers towards crop insurance schemes is relatively good in the State of Maharashtra. Since 1999-2000, more than 421 lakh farmers have been covered in the State under crop insurance schemes.

Implementation of National Agriculture Income Insurance Scheme

- 145. SHRIMATI RENUKA CHOWDHURY: Will the Minister of AGRICULTURE be pleased to state:
- (a) whether Government proposes to launch a new National Agriculture Income Insurance Scheme, if so, the salient features and components of the scheme; and
 - (b) the steps taken by Government for early implementation of the scheme?

THE MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE (SHRI MOHANBHAI KALYANJIBHAI KUNDARIYA): (a) and (b) Yes, Sir. With a view to better serve the interest of farmers, Government is desirous to develop a new crop insurance scheme to protect them against both yield and price fluctuations. The contours of the proposed scheme have been discussed with State Governments, UT Administrations and other stakeholders. The scheme is under finalization.

Shortage of cold storages

- 146. SHRI SANJAY RAUT: Will the Minister of AGRICULTURE be pleased to state:
- (a) the quantum of fruits and vegetables wasted due to lack of adequate cold storage facilities during the last three years, State-wise;

- (b) the present requirement and availability of cold storage facilities for fruits and vegetables in the country, State-wise;
- (c) whether Government has also considered public-private-partnership to overcome the shortage of cold storages in the country, if so, the details thereof; and
- (d) the other steps taken/being taken by Government to increase cold storage infrastructure across the country?

THE MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE (SHRI MOHANBHAI KALYANJIBHAI KUNDARIYA): (a) A study published in 2012 by Central Institute of Post Harvest Engineering and Technology (CIPHET), Indian Council of Agricultural Research (ICAR), estimated that quantitative harvest and post harvest losses including losses due to shortage of cold storage of agricultural produce, fruits and vegetables were in the range of 1.1% to 18.05%. The details of harvest and post harvest losses of major agricultural crops and commodities estimated by this study are given in the Statement-I (See below). The details of year-wise and State-wise losses are not available.

- (b) According to the Report of The Task Force on Cold Chain Projects of Ministry of Food Processing Industries (October, 2014), additional 7.5 million tons of cold chain capacity was required to be created over the next five year. The total cold storage capacity created in the country up to March 31, 2014 is estimated to be 31.83 million MT. State/UT-wise distribution of cold storages is given in the Statement-II (See below).
- (c) Department of Economic Affairs (DEA), Ministry of Finance has formulated the Viability Gap Funding (VGF) scheme which provides financial support in the form of grants, one time or deferred, to infrastructure projects undertaken through public private partnership with a view to make them commercially viable. The scheme provides total Viability Gap Funding up to twenty per cent of the total project cost. Creation of modern storage capacity including cold chains and post-harvest storage are covered under this scheme.
- (d) Government is implementing various credit linked assistance programmes for creation of post-harvest infrastructure including establishment and modernization of cold storages, processing units, pack houses, pre-cooling units, controlled atmosphere storage, reefer vans and setting up of ripening chambers. Credit linked back ended subsidy @ 35% of the project cost in general areas and @ 50% in hilly and scheduled areas is available for these activities to individuals, group of farmers/growers/ consumers, partnership/ proprietary firms, self help groups, farmer producer organizations, companies, corporations, cooperatives, local bodies, agricultural produce

market committees and State Governments under Mission for Integrated Development of Horticulture (MIDH) scheme. The assistance under the scheme is linked to adoption of technical standards.

Besides, Ministry of Food Processing Industries (MFPI) is implementing schemes to provide integrated cold chain and processing facilities from farm gate to consumers. Further, Ministry of Commerce through Agricultural and Processed Food Products Export Development Authority (APEDA) also provides assistance for cost of cold chain units related to export activity.

Statement–I

Harvest and post harvest losses of major agricultural crops and commodities

Sl. No	Name of crops/commodities	% average loss				
1.	Paddy	5.19				
2.	Wheat	5.96				
3.	Maize	4.10				
4.	Bajra	4.80				
5.	Sorghum	3.87				
6.	Pigeon Pea	5.39				
7.	Chick Pea	4.28				
8.	Black Gram	6.06				
9.	Green Gram	5.51				
10.	Mustard	8.89				
11.	Cottonseed	2.76				
12.	Soyabean	6.26				
13.	Safflower	3.68				
14.	Sunflower	4.55				
15.	Groundnut	10.07				
16.	Apple	12.26				
17.	Banana	6.60				
18.	Citrus	6.38				
19.	Grapes	8.30				
20.	Guava	18.05				
21.	Mango	12.74				

Sl. No	Name of crops/commodities	% average loss					
22.	Papaya	7.36					
23.	Sapota	5.77					
24.	Onion	7.51					
25.	Tomato	12.98					
26.	Cabbage	6.94					
27.	Cauliflower	6.88					
28.	Green Pea	10.28					
29.	Potato	8.99					
30.	Tapioca	9.19					
31.	Egg	6.55					
32.	Inland Fish	6.92					
33.	Marine Fish	2.78					
34.	Meat	2.23					
35.	Poultry Meat	3.65					
36.	Milk	0.77					
37.	Jaggery and Khandsari	1.87					
38.	Arecanut	7.9					
39.	Black Pepper	3.9					
40.	Cashew	1.1					
41.	Chilli	5.6					
42.	Coconut	5.4					
43.	Coriander	7.3					
44.	Sugarcane	8.7					
45.	Turmeric	7.4					

Source: Harvest and Post Harvest Losses of Major Crops and Livestock Produce in India. All India Coordinated Research Project on Post Harvest Technology, (ICAR), Ludhiana (2012).

State-wise distribution of Cold Storages as on 31.03.2014

Sl.	Name of the State	ne of the State Upto 2009*		2009-10 to 2013-14							Total	
No.			_	N	NHB		NHM		MoFPI			
		No.	Capacity (MT)	No.	Capacity (MT)	No.	Capacity (MT)	No.	Capacity (MT)	No.	Capacity (MT)	
1	2	3	4	5	6	7	8	9	10	11	12	
1.	Andaman and Nicobar Islands (UT)	2	210	0	0	0	0	0	0	2	210	
2.	Andhra Pradesh	290	900606	28	179810	79	485962	7	11450	404	1577828	
3.	Arunachal Pradesh	1	5000	0	0	0	0	1	0	2	5000	
4.	Assam	24	88068	6	30334	0	0	4	1250	34	119652	
5.	Bihar	246	1147041	28	111821	28	147533	1	0	303	1406395	
6.	Chandigarh (UT)	6	12216	0	0	0	0	0	0	6	12216	
7.	Chhattisgarh	69	341885	10	45343	8	40263	2	275	89	427766	
8.	Delhi	95	126158	2	3699	0	0	0	0	97	129857	
9.	Goa	29	7705	0	0	0	0	0	0	29	7705	
10.	Gujarat	398	1267304	44	128412	110	621407	8	13750	560	2030873	
11.	Haryana	244	393121	23	84455	23	98573	5	12500	295	588649	
12.	Himachal Pradesh	18	19858	3	8324	0	0	9	10375	30	38557	
13.	Jammu and Kashmir	19	42869	5	21900	0	0	4	0	28	64769	
14.	Jharkhand	45	170148	7	32357	3	14775	0	0	55	217280	

1	2	3	4	5	6	7	8	9	10	11	12
15.	Karnataka	170	407165	7	75863	8	31849	4	11875	189	526752
16.	Kerala	193	58105	1	5000	0	0	3	15250	197	78355
17.	Lakshadweep (UT)	1	15	0	0	0	0	0	0	1	15
18.	Madhya Pradesh	197	808052	16	78939	44	209177	3	1000	260	1097168
19.	Maharashtra	466	546748	22	76507	23	54603	29	28445	540	706303
20.	Manipur	0	0	0	0	0	0	1	2175	1	2175
21.	Meghalaya	3	3200	1	5000	0	0	0	0	4	8200
22.	Mizoram	0	0	1	3471	0	0	2	460	3	3931
23.	Nagaland	2	6150	0	0	0	0	0	0	2	6150
24.	Odisha	101	291039	0	0	9	35600	1	0	111	326639
25.	Puducherry (UT)	3	85	0	0	0	0	0	0	3	85
26.	Punjab	422	1345193	44	127478	133	519416	7	12690	606	2004777
27.	Rajasthan	110	324226	22	79564	18	76162	4	80	154	480032
28.	Sikkim	1	2000	0	0	0	0	1	0	2	2000
29.	Tamil Nadu	148	238536	13	50835	1	6000	1	300	163	295671
30.	Tripura	11	29450	2	9731	0	0	0	0	13	39181
31.	Uttar Pradesh	1589	10118000	439	2626785	142	873353	6	14900	2176	13633038
32.	Uttarakhand	15	68499	2	3528	0	0	11	12518	28	84545
33.	West Bengal	463	5682000	8	31423	24	147195	7	41307	502	5901925
	Total	5381	24450652	734	3820581	653	3361867	121	190600	6889	31823699

Source: Directorate of Marketing and Inspection (DMI) upto 2009, National Horticulture Board (NHB), National Horticulture Mission (NHM) and Ministry of Food Processing Industries (MoFPI)