

## ***Towards Achieving Self-sufficiency in Pulses in India***

In India, pulses production has been hovering around 13.5-15 million tonnes during the last decade, while annual domestic demand is 18-19 million tonnes. As per estimates of Govt. of India, farmers of the country are going to harvest ever highest quantity of pulses *i.e.*, 17.29 million tonnes during 2010-11. In the history of pulses cultivation in the country, highest production (14.91 million tonnes) was achieved during the year 2003-04, whereas in 2009-10, pulses production remained 14.66 million tonnes. This increase in pulses production in 2010-11 over 2009-10 is due to increase in production of *kharif* pulses (7.3 million tonnes) in general and of pigeonpea (3.15 million tonnes) and blackgram (1.82 million tonnes) in particular. It is also estimated that there will be bumper harvest of *rabi* pulses this year.

Among various factors contributing to higher production (17.29 million tonnes) of pulses this year, enhanced availability of quality seeds of high yielding varieties of pulses to growers is most important. Indian Council of Agricultural Research (ICAR) has made sincere efforts in producing required quantity of breeder seeds of major pulse crops during last 3 years. During 2007-08, ICAR Institutes *viz.*, Indian Institute of Pulses Research (IIPR), Indian Agricultural Research Institute (IARI), State Agricultural Universities (SAUs) and State farm Corporation of India (SFCI) have produced 11,485 q breeder seed of major pulses which was subsequently converted into foundation and certified seeds and made available to farmers. During 2008-09, the country has produced 13,335 q breeder seed which was sufficient to achieve targeted seed replacement rate (SRR) in major pulse crops.

Crop	Breeder seed produced (q)			
	2006-07	2007-08	2008-09	2009-10
<b>Chickpea</b>	<b>6667.60</b>	<b>8392.69</b>	<b>9735.51</b>	<b>8849.67</b>
<b>Pigeonpea</b>	<b>506.40</b>	<b>599.69</b>	<b>644.15</b>	<b>539.13</b>
<b>Mungbean</b>	<b>658.40</b>	<b>991.58</b>	<b>950.93</b>	<b>1168.65</b>
<b>Urdbean</b>	<b>233.48</b>	<b>483.65</b>	<b>379.40</b>	<b>617.15</b>
<b>Lentil</b>	<b>288.27</b>	<b>416.28</b>	<b>414.34</b>	<b>515.96</b>
<b>Fieldpea</b>	<b>718.70</b>	<b>601.42</b>	<b>1210.66</b>	<b>1303.60</b>
<b>Total</b>	<b>9072.85</b>	<b>11485.31</b>	<b>13334.99</b>	<b>12994.16</b>



Apart from enhanced availability of quality seeds of high yielding varieties, the strong technology back-up, favourable monsoon, increase in minimum support prices and effective government programmes for enhancing pulses production contributed significantly in

increasing pulses production in the country. This clearly indicate that country can achieve self sufficiency in pulses with appropriate the technology support, favourable Govt. policies and remunerative price to farmers.

Conduct of 6000 technology demonstrations on various pulse crops in different states were planned under the aegis of the ICAR with technology back up by Indian Institute of Pulses Research. Krishi Vigyan Kendra (KVKs) working in the targeted states were given the responsibility of organizing these demonstrations. During summer 2010, 90 demonstrations on high yielding varieties along with package technology showed that mungbean yield can be enhanced by 46.7% with average grain yield of 1100 kg/ha. Net return of Rs. 35700 per ha with short duration crop maturing in less than 65 days has encouraged farmers to cultivate summer mungbean. Similarly, encouraging incremental yield achieved during *kharif* from short duration pulse crops like mungbean (1040 kg/ha), urdbean (810 kg/ha) and pigeonpea (1200 kg/ha) showed that popularization of high yielding and disease resistant varieties along with matching package technology can enhance the present level of summer and *kharif* pulses productivity from 670 kg/ha to 1035 kg/ha. The results of successful technology demonstrations provided enough confidence on the existing technologies to farmers, extension workers, state agencies and planners.

Crop	No. of technology demonstrations	Average yield (kg/ha)	% Increase over local	Net profit (Rs./ha)
<b>Summer</b>				
Mungbean	90	1100	46.7	35700
<b>Kharif</b>				
Pigeonpea	348	1200	34.3	26440
Mungbean	808	1040	40.4	23940
Urdbean	529	810	43.3	17986
<b>Total</b>	<b>1775</b>	<b>1037.5</b>	<b>-</b>	<b>-</b>

Pulses remained in the main focus while increasing minimum support price. For example, increase in MSP for pigeonpea during 2010-11 was Rs. 700/q i.e., 30% increase. This also helped in increase in area under *kharif* pulse crops. In addition, the favourable monsoon during *kharif* 2010 helped in boosting the production of *kharif* pulses. Good monsoon

Crop	MSP (Rs.) 2009-10	MSP (Rs.) 2010-11	% Increase over 2009-10
Chickpea	1760	2100	19
Pigeonpea	2300	3000	30
Mungbean	2760	3170	15
Urdbean	2520	2900	15
Lentil	1870	2250	20

during *kharij* provided enough moisture to raise good *rabi* crops. The increase in MSP has made an impact on cultivation of pulse crops and farmers might have used farm inputs like irrigation, fertilizers, plant protection measures etc. which has led in ever high production of pulses in India. The record production will reduce our dependence on imports to meet the shortfall in the domestic demand.

The Department of Agriculture & Cooperation (DAC), Ministry of Agriculture, Govt. of India has also launched several programmes including NFSM/A3P, ATMA, RKVY and 60,000 pulses and oilseeds villages. This has also encouraged farmers to grow more pulses. Under NFSM-pulses programme, Government of India has provided enough support for breeder and quality seed production as well as training to extension workers and farmers. During the last year 240 extension personnel and 2628 farmers of different pulses growing states were trained on improved pulses production and protection technologies. These efforts need to be further strengthened to achieve self-sufficiency in pulses.